

COMMONWEALTH OF PENNSYLVANIA  
ENVIRONMENTAL HEARING BOARD

LOREN KISKADDEN, :  
APPELLANT :  
VS : DOCKET NO. 2-11-149-R  
DEPARTMENT OF ENVIRONMENTAL :  
PROTECTION, :  
APPELLEE :  
VS :  
RANGE RESOURCES - APPALACHIA: :  
LLC, :  
PERMITTEE :

DEPOSITION OF: TARU UPADHYAY

TAKEN BY: APPELLANT

BEFORE: KAREN BLOUCH, RMR  
NOTARY PUBLIC

DATE: SEPTEMBER 26, 2012, 10:26 AM

PLACE: PENNSYLVANIA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION  
SOUTH CENTRAL REGIONAL OFFICE  
909 ELMERTON AVENUE  
HARRISBURG, PENNSYLVANIA

2

1 APPEARANCES:  
2 SMITH BUTZ  
3 BY: KENDRA L. SMITH, ESQUIRE  
4 And  
5 JOHN M. SMITH, ESQUIRE  
6 125 TECHNOLOGY DRIVE, SUITE 202  
7 BAILEY CENTER I, SOUTHPOINTE  
8 CANONSBURG, PA 15317  
9 724-745-5121  
10 Klsmith@smithbutzlaw.com  
11 FOR - APPELLANT  
12 GOVERNOR'S OFFICE OF GENERAL COUNSEL  
13 BY: RICHARD T. WATLING, ASSISTANT COUNSEL  
14 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
15 SOUTHWEST OFFICE OF CHIEF COUNSEL  
16 400 WATERFRONT DRIVE  
17 PITTSBURGH, PA 15222-4745  
18 412-442-4262  
19 Rrwatling@state.pa.us  
20 FOR - APPELLEE  
21 GOVERNOR'S OFFICE OF GENERAL COUNSEL  
22 BY: ANN JOHNSTON, ASSISTANT COUNSEL  
23 909 ELMERTON AVENUE  
24 HARRISBURG, PA 17011  
25 717-787-0475  
Anjohnston@pa.gov  
FOR - DEP BUREAU OF LABORATORIES  
FULBRIGHT & JAWORSKI, L.L.P.  
BY: MEGAN E. SMITH, ESQUIRE  
SOUTHPOINTE ENERGY COMPLEX  
370 SOUTHPOINTE BOULEVARD  
SUITE 300  
CANONSBURG, PA 15317-8572  
724-416-0434  
Mesmith@fulbright.com  
FOR - PERMITTEE  
ALSO PRESENT:  
URS CORPORATION  
JAMES PINTA, JR., Ph.D, PG

4

1 EXHIBITS  
2 Deposition Exhibit Number MARKED  
3 16 - Sample Submission 283  
4 17 - Target Compounds 290  
5 18 - Internal Standard Compounds Area 291  
6 and RT Summary  
7 19 - Sample Submission Sheet 292  
8 20 - Organics Laboratory Qualifiers 295  
9 21 - Data 300  
10 22 - Microbiology Sample Submission 311  
11 Sheet  
12 23 - Organics Laboratory Qualifiers 313  
13 24 - Sample Submission Sheet 315  
14 25 - Analytical Report for Land 316  
15 Recycling & Waste Management  
16 26 - Target Compounds 319  
17 27 - Report dated 29 March, 2012 320  
18 28 - Sample Submission Sheet 321  
19 29 - Analytical Report for Land 323  
20 Recycling & Waste Management  
21 30 - Target Compounds 324  
22 31 - Colilert MPN Worksheet 327  
23  
24  
25

3

1 INDEX  
2 WITNESS DIRECT CROSS REDIRECT  
3 Tara Upadhyay 5 334  
4 By Mr Watling 327  
5 By Ms. Megan Smith 330  
6 EXHIBITS  
7 DEPOSITION EXHIBIT NUMBER MARKED  
8 1 - PA-DEP Recommended Basic Oil & 97  
9 Gas Pre-Drill Parameters  
10 2 - Sample Submission Form 117  
11 3 - Request to Analyze Voidable Samples 157  
12 4 - Analytical Report for Land Recycling 183  
13 and Waste Management  
14 5 - QA/QC data package 211  
15 6 - Sample Submission Sheet 213  
16 7 - Microbiology Sample Submission Sheet 223  
17 for PA DEP  
18 8 - Analytical Report for Land Recycling 226  
19 & Waste Management  
20 9 - Microbiology Sample Submission Sheet 249  
21 for PA DEP  
22 10 - Analytical data 255  
23 11 - Sample submission form 274  
24 12 - Analytical Report for Land Recycling 276  
25 & Waste Management  
13 - Target Compounds 279  
14 - Internal Standard Compounds Area 280  
And RT Summary

5

1 TARU UPADHYAY, called as a witness,  
2 being sworn, testified as follows:  
3  
4

# DIRECT EXAMINATION

6 BY MS. KENDRA SMITH:

7 Q Good morning, ma'am. My name is  
8 Kendra Smith, and I represent Mr. Kiskadden in an  
9 action he has filed against the DEP.

10 MR. JOHN SMITH: Can you keep your  
11 voice up because I don't know if Megan can hear  
12 you down there.

13 BY MS. KENDRA SMITH:

14 Q Before we begin, can you state your  
15 name, for the record, spelling your last name,  
16 please.

17 A My name is Tara Upadhyay.

18 Q Could you spell your last name,  
19 please?

20 A U-P-A-D-H-Y-A-Y.

21 Q Before we begin today, have you ever  
22 been deposed before, sitting here doing what we're  
23 doing today, taking your testimony under oath?

24 A Yes.

25 Q How many times?

<p>6</p> <p>1 A Once.</p> <p>2 Q What was that in?</p> <p>3 A It was a civil service case.</p> <p>4 Q Do you remember or recall what the</p> <p>5 circumstances of the case were?</p> <p>6 A Not – no.</p> <p>7 Q About how long ago was that?</p> <p>8 A A couple of years back.</p> <p>9 Q And were you testifying on behalf of</p> <p>10 the DEP?</p> <p>11 A Yes.</p> <p>12 Q Do you remember the individual who</p> <p>13 was involved in the case, the name?</p> <p>14 A No.</p> <p>15 Q And you don't recall what the case</p> <p>16 was about?</p> <p>17 A It was about the job interview or,</p> <p>18 like, hiring individual, he was – he filed a</p> <p>19 complaint with civil service because he did not</p> <p>20 get the job with DEP. That's something</p> <p>21 really – something like that.</p> <p>22 Q Have you ever testified at trial</p> <p>23 before?</p> <p>24 A No.</p> <p>25 Q Being that it's been a couple of</p>	<p>8</p> <p>1 verbal in nature. The court reporter can't take</p> <p>2 down a shrug of the shoulders or a nod of the</p> <p>3 head, okay?</p> <p>4 A Okay.</p> <p>5 Q Also, if you could attempt to stay</p> <p>6 away from uh-huh or huh-uh, for purposes of the</p> <p>7 record so that your answers to the questions read</p> <p>8 clearly, okay?</p> <p>9 A Okay.</p> <p>10 Q And also during the course of the</p> <p>11 deposition, if you need to take a break for any</p> <p>12 reason, please just let me know and I would be</p> <p>13 happy to accommodate you in that, okay?</p> <p>14 A Okay.</p> <p>15 Q Could you tell me what your current</p> <p>16 business address is?</p> <p>17 A 2575 Interstate Drive, Harrisburg,</p> <p>18 Pennsylvania.</p> <p>19 Q Who is your current employer?</p> <p>20 A Department of Environmental</p> <p>21 Protection, Commonwealth of Pennsylvania.</p> <p>22 Q Since when have you been employed by</p> <p>23 the DEP?</p> <p>24 A 1994.</p> <p>25 Q Just briefly, a little bit, prior to</p>
<p>7</p> <p>1 years since you have been deposed and you have</p> <p>2 never testified at trial, I just want to go over a</p> <p>3 couple of ground rules to help this deposition go</p> <p>4 a little more smoothly.</p> <p>5 A Okay.</p> <p>6 Q As you can see, there is a court</p> <p>7 reporter here taking down everything you and I</p> <p>8 say. So it's important for you to let me finish</p> <p>9 my question before you begin your answer so that</p> <p>10 the record reads clearly, okay?</p> <p>11 A Yes.</p> <p>12 Q Likewise, I will try and do the same</p> <p>13 and allow you to finish your answer before I begin</p> <p>14 my question, okay?</p> <p>15 A Okay.</p> <p>16 Q Also during the course of today, if</p> <p>17 you don't hear a question I have asked or you</p> <p>18 don't understand a question I've asked, please ask</p> <p>19 me to restate it or rephrase it. If you do not, I</p> <p>20 will assume that the record will read that the</p> <p>21 answer that you gave to the question that was</p> <p>22 asked was the one you want it to be, okay?</p> <p>23 A Okay.</p> <p>24 Q Also during the course of today, all</p> <p>25 of your answers to all of my questions need to be</p>	<p>9</p> <p>1 your deposition here today, have you had any</p> <p>2 conversations about the testimony that you would</p> <p>3 give here today with anyone from the DEP?</p> <p>4 A No.</p> <p>5 Q Have you had any conversations with</p> <p>6 Martina McGarvey regarding your testimony here</p> <p>7 today?</p> <p>8 MR. WATLING: First of all,</p> <p>9 objection to the extent this seeks attorney-</p> <p>10 client communications.</p> <p>11 MS. KENDRA SMITH: I don't believe</p> <p>12 there's any involved.</p> <p>13 MR. WATLING: Okay. Could you</p> <p>14 rephrase the question?</p> <p>15 A Could you rephrase the question?</p> <p>16 BY MS. KENDRA SMITH:</p> <p>17 Q Sure. Have you had any conversations</p> <p>18 prior to your deposition here today about your</p> <p>19 testimony with Martina McGarvey? I'm sorry,</p> <p>20 McGarvey?</p> <p>21 A McGarvey. She requested the</p> <p>22 sample data to be collected – I mean,</p> <p>23 produced. So she asked me to receive this</p> <p>24 request and we need this quality control data.</p> <p>25 And I – that's all, that's –</p>

<p style="text-align: right;">10</p> <p>1 Q Do you recall when that was done or</p> <p>2 when you had that conversation?</p> <p>3 A No, I -- I mean, it was just last</p> <p>4 couple of months since the request, we received</p> <p>5 the request from the counsel. During that</p> <p>6 time, she said that we need this sample data,</p> <p>7 and we need to get this quality control data.</p> <p>8 And that's what the conversation we had.</p> <p>9 Because we were looking at the sample numbers</p> <p>10 and all that.</p> <p>11 Q Sure. Okay. And so did you review</p> <p>12 those sample numbers with her before the documents</p> <p>13 were produced?</p> <p>14 A I was given the sample numbers.</p> <p>15 And based on the sample numbers, I started</p> <p>16 working with my staff members to gather the</p> <p>17 data.</p> <p>18 Q And did she provide you with the</p> <p>19 sample numbers?</p> <p>20 A She -- yes.</p> <p>21 Q Do you know where she got those from?</p> <p>22 A No, I don't.</p> <p>23 Q Prior to your deposition here today,</p> <p>24 have you had any conversations --</p> <p>25 A May I correct myself?</p>	<p style="text-align: right;">12</p> <p>1 you have any conversations about your testimony</p> <p>2 that you would give today or these documents or</p> <p>3 Mr. Kiskadden's case at all with Mr. Alan Eichler?</p> <p>4 A No.</p> <p>5 Q Have you ever had any conversations</p> <p>6 with Mr. Eichler about Mr. Kiskadden's case or his</p> <p>7 test results that your lab had analyzed?</p> <p>8 A No.</p> <p>9 Q Has Mr. Eichler ever asked you to</p> <p>10 interpret any of the water testing or analysis</p> <p>11 that your lab did with regard to Mr. Kiskadden's</p> <p>12 drinking water?</p> <p>13 MR. WATLING: Objection as to form,</p> <p>14 meaning of interpret.</p> <p>15 BY MS. KENDRA SMITH:</p> <p>16 Q You can go ahead and answer, if you</p> <p>17 understand the question.</p> <p>18 A I don't understand. Can you</p> <p>19 please rephrase the question?</p> <p>20 Q Sure. Did you ever have a</p> <p>21 conversation with Mr. Eichler wherein he asked you</p> <p>22 to interpret the water analysis data regarding Mr.</p> <p>23 Kiskadden's drinking water?</p> <p>24 A No.</p> <p>25 Q Did you ever have any conversations</p>
<p style="text-align: right;">11</p> <p>1 Q Sure.</p> <p>2 A She got the request from Rick, our</p> <p>3 counsel.</p> <p>4 Q Okay.</p> <p>5 MR. WATLING: Based on your discovery</p> <p>6 request.</p> <p>7 MS. KENDRA SMITH: Okay. The only</p> <p>8 reason I'm asking is to clarify, counsel, since</p> <p>9 you have interjected that, is in my discovery</p> <p>10 request, there are no sample numbers. There's</p> <p>11 only names.</p> <p>12 BY MS. KENDRA SMITH:</p> <p>13 Q That's why I was asking where the</p> <p>14 sample numbers came from, who gave them to either</p> <p>15 you -- well, Ms. McGarvey gave them to you,</p> <p>16 correct, the sample numbers for you to pull all</p> <p>17 the data?</p> <p>18 A Yes. She gave me the sample</p> <p>19 numbers. That's all I got. And that's how we</p> <p>20 find the data.</p> <p>21 Q And so you don't know where she got</p> <p>22 the actual sample numbers that were given to you,</p> <p>23 correct?</p> <p>24 A No.</p> <p>25 Q Prior to your deposition today, did</p>	<p style="text-align: right;">13</p> <p>1 with Mr. Eichler where he asked you whether or</p> <p>2 not, based on the water analysis that your lab did</p> <p>3 for Mr. Kiskadden's drinking water, whether or not</p> <p>4 it had been impacted by Marcellus drilling</p> <p>5 activities?</p> <p>6 A No.</p> <p>7 Q Have you ever had any conversations</p> <p>8 with Mr. Eichler about any water analysis that you</p> <p>9 have done for any individual or property next to</p> <p>10 or near a natural gas drilling facility and</p> <p>11 whether or not, based on the analysis your lab</p> <p>12 did, whether you thought there was any impact on</p> <p>13 those water sources as a result of natural gas</p> <p>14 drilling operations?</p> <p>15 MR. WATLING: Objection as to form</p> <p>16 because it's a compound question.</p> <p>17 BY MS. KENDRA SMITH:</p> <p>18 Q You can go ahead and answer.</p> <p>19 MR. WATLING: You can answer if you</p> <p>20 think you understand some component of that. But</p> <p>21 please phrase your answer in what you think you</p> <p>22 understand.</p> <p>23 A Can you please repeat the</p> <p>24 question?</p> <p>25 BY MS. KENDRA SMITH:</p>



<p style="text-align: right;">14</p> <p>1 Q Sure.</p> <p>2 MS. KENDRA SMITH: Could you read</p> <p>3 back the question?</p> <p>4 (Question read.)</p> <p>5 A The answer is no.</p> <p>6 BY MS. KENDRA SMITH:</p> <p>7 Q Have you ever had any conversations</p> <p>8 with anyone at the DEP as to whether or not any</p> <p>9 water analysis that your lab has done, in your</p> <p>10 estimation and interpretation of that data,</p> <p>11 whether those water sources have been impacted by</p> <p>12 natural gas drilling activities?</p> <p>13 A No.</p> <p>14 MR. WATLING: Objection as to</p> <p>15 form. You're assuming that in her capacity at</p> <p>16 the DEP that she would make those observations</p> <p>17 or conclusions.</p> <p>18 BY MS. KENDRA SMITH:</p> <p>19 Q Could you state your answer? Because</p> <p>20 I believe counsel spoke over you. Go ahead.</p> <p>21 A No.</p> <p>22 Q Prior to your deposition here today,</p> <p>23 have you ever had any conversations with Mr. Bryon</p> <p>24 Miller regarding your testimony here today, Mr.</p> <p>25 Kiskadden's water analysis or any of the documents</p>	<p style="text-align: right;">16</p> <p>1 communications.</p> <p>2 MS. KENDRA SMITH: I'm not seeking.</p> <p>3 I'm just asking if she had had the conversation.</p> <p>4 MR. WATLING: You may answer.</p> <p>5 A I had a conversation with counsel,</p> <p>6 Rick. I – based on what samples, data I have,</p> <p>7 what we received, how I arranged them and made</p> <p>8 copies and then based on just to – how – what –</p> <p>9 MR. WATLING: I will direct you,</p> <p>10 that's a sufficient response.</p> <p>11 A That's what we did.</p> <p>12 BY MS. KENDRA SMITH:</p> <p>13 Q I don't want you to get into</p> <p>14 specifics of the conversation between you and</p> <p>15 counsel.</p> <p>16 A We just had conversation.</p> <p>17 Q When did you have that conversation?</p> <p>18 A I had a conversation with him for,</p> <p>19 like, few days in last few weeks by e-mail and</p> <p>20 by – yesterday we talked in person.</p> <p>21 Q And how long was your meeting</p> <p>22 yesterday? Approximately.</p> <p>23 MR. WATLING: Objection. Not likely</p> <p>24 to lead to the production of municipal evidence.</p> <p>25 Attorney-client met yesterday is sufficient.</p>
<p style="text-align: right;">15</p> <p>1 that were produced today in QA/QC data?</p> <p>2 A No.</p> <p>3 Q Have you had any conversations ever</p> <p>4 with Mr. Miller regarding water analysis or water</p> <p>5 collection?</p> <p>6 A No.</p> <p>7 Q Prior to your deposition here today,</p> <p>8 did you have any conversations with Mr. John</p> <p>9 Carson about Mr. Kiskadden's case, any of his</p> <p>10 water samples or QA/QC data or your testimony here</p> <p>11 today?</p> <p>12 A No.</p> <p>13 Q Have you had, prior to your</p> <p>14 deposition today, have you had any conversations</p> <p>15 with Secretary Krancer about the testimony you</p> <p>16 would give here today, about any of the QA/QC data</p> <p>17 regarding Mr. Kiskadden or Mr. Kiskadden's case?</p> <p>18 A No.</p> <p>19 Q With regard to your deposition here</p> <p>20 today, have you ever had any conversations with</p> <p>21 Attorney Watling, Attorney Heilman or Attorney</p> <p>22 Myers about your testimony here today or anything</p> <p>23 regarding Mr. Kiskadden's water analysis?</p> <p>24 MR. WATLING: Objection to the extent</p> <p>25 that this question seeks attorney-client</p>	<p style="text-align: right;">17</p> <p>1 MS. KENDRA SMITH: The objection is</p> <p>2 noted. However, as you know, in a discovery</p> <p>3 deposition, that is not a proper objection. A</p> <p>4 proper objection is a form to a question.</p> <p>5 So are you directing this witness not</p> <p>6 to answer my question how long her meeting was</p> <p>7 with you yesterday? Which does not ask anything</p> <p>8 about attorney-client privilege conversations.</p> <p>9 MR. WATLING: I'm objecting to the</p> <p>10 extent this is inquiring into details that have</p> <p>11 nothing to do with this case; that it's</p> <p>12 burdensome.</p> <p>13 MS. KENDRA SMITH: It's not</p> <p>14 burdensome, Rick, she's sitting right here. She</p> <p>15 can answer, was it a half hour, two hours.</p> <p>16 MR. WATLING: It's setting a tone</p> <p>17 here as to what we're spending our time here</p> <p>18 today.</p> <p>19 MS. KENDRA SMITH: It's not your tone</p> <p>20 to set.</p> <p>21 MR. WATLING: Taru, if you want to</p> <p>22 respond how long we met yesterday, that's fine.</p> <p>23 Kendra, I would ask you to keep your questions</p> <p>24 focused on this appeal.</p> <p>25 MS. KENDRA SMITH: Rick, this is my</p>

<p>18</p> <p>1 deposition for purposes of the Kiskadden case. I 2 will ask the questions I deem to be relevant in 3 this. As the Judge said during our conference, I 4 get my discovery. That's what I'm here to do. 5 BY MS. KENDRA SMITH: 6 Q Could you answer the question, ma'am? 7 A For a few hours. 8 Q Other than Mr. Watling, did you ever 9 have any conversations with Attorney Myers or 10 Attorney Heilman of the DEP regarding Mr. 11 Kiskadden's case and your testimony here today? 12 A No. 13 Q I want to go back just a little bit. 14 Could you tell me where it was that you went to 15 college? 16 A I went to college in India. 17 Q And did you graduate from college in 18 India? 19 A Yes. 20 Q And what was your degree in? 21 A Chemistry. 22 Q When did you graduate from college in 23 India? 24 A 1980. 25 Q In India, the college you graduated</p>	<p>20</p> <p>1 A No. 2 Q When you came to the United States, 3 was there any equivalency test that you had to 4 take in order to equivocate your degrees that you 5 obtained in India to the ones in the United 6 States? 7 A No. 8 Q When did you obtain your Master's 9 degree? 10 A I got my Master's in 1980. I 11 graduated in 1978, undergraduate. 12 Q In your Master's with organic 13 chemistry, do you do any analytic chemistry? 14 A Yes. It's part of curriculum. 15 Q So with regard to your degree in 16 organic chemistry, could you tell me what the 17 difference would be between an organic chemist and 18 an analytic chemist? To your understanding, of 19 course. 20 A Organic chemist has to be an 21 analytical chemist because you do analytical 22 work when you do organic chemistry. It's part 23 of chem, organic chemistry, when you — you 24 learn — you do learn analytical chemistry as 25 well.</p>
<p>19</p> <p>1 with a degree in chemistry, is that equivalent to 2 a BS here in the United States? 3 A I have Master's. Yes. 4 Q So did you get your Master's here in 5 the United States? 6 A No, I got Master's in India. 7 Q And what was your Master's degree in? 8 A Organic chemistry. 9 Q With regard to your undergraduate 10 degree in chemistry in India, how many years did 11 you put in to obtain that degree? How many years 12 of schooling? 13 A Four. 14 Q For your Master's degree, how many 15 years? 16 A Two. 17 Q Other than your Master's degree, do 18 you hold any other degrees, Ph.D.? 19 A No. 20 Q I'm sorry? 21 A No. 22 Q Could you tell me, in your organic 23 chemistry Master's program, was there any 24 particular area you specialized in with regard to 25 organic chemistry?</p>	<p>21</p> <p>1 Q And you would agree, would you not, 2 that there are Master's programs specifically for 3 analytic chemists versus organic chemistry, 4 correct? 5 A Yes. 6 Q And so when those degrees, when you 7 were going for your Master's, you chose organic 8 chemistry versus analytical chemistry, right? 9 A But that was not the choice we had 10 there. 11 Q Okay. And so with your Master's 12 degree combined the organic and analytical aspects 13 of chemistry within your degree? 14 A That is correct. 15 Q And so when your degree, your 16 Master's degree was issued, it's issued only for 17 organic chemistry though, not analytic chemistry? 18 A That is correct. 19 Q When did you come to the United 20 States, what year? 21 A First time I came in 1982. 22 Q How long did you stay when you first 23 came to the United States? 24 A A year. 25 Q And were you working at that time</p>

22

1 or --  
2 A No.  
3 Q Were you going to school?  
4 A No.  
5 Q What were you doing?  
6 A Stay-at-home wife.  
7 Q And then you then left in  
8 approximately 1983. When did you come back?  
9 A 1984.  
10 Q And were you working outside of the  
11 home in 1984?  
12 A No.  
13 Q So once you came to the United  
14 States, what was -- when was the first -- when did  
15 you hold your first job, what year, approximately?  
16 A 1993.  
17 Q 1993?  
18 A Um-hmm.  
19 Q And so prior to '93, you did not work  
20 at all?  
21 A Yes, that's correct.  
22 Q Outside the home.  
23 A That is correct.  
24 Q What was the first job that you held  
25 in 1993?

23

1 A I worked in a private  
2 environmental lab for about a year.  
3 Q What lab was that?  
4 A Johnston Lab.  
5 Q Where was that located?  
6 A It was located in Harrisburg.  
7 Q Is it no longer in business?  
8 A I don't think so.  
9 Q What position did you hold with them?  
10 A I worked as a technician.  
11 Q What specifically were you working on  
12 as a technician?  
13 A Preparing samples.  
14 Q What type of accreditation did the  
15 Johnston Lab have at the time you were working  
16 there?  
17 A I don't remember.  
18 Q Was it an environmental lab, do you  
19 know?  
20 A It was an environmental lab.  
21 Q And the samples that you were working  
22 with, was it primarily one type of sample, was it  
23 soil, water, air?  
24 A Any kind of matrix. Whatever  
25 sample needed to be prepared, I prepared them.

24

1 Q Did you work specifically in any type  
2 of division there, whether it was organic,  
3 inorganic?  
4 A It was organic.  
5 Q How long did you hold that position  
6 or work for Johnston labs?  
7 A Approximately one year.  
8 Q Why did you leave there?  
9 A Because I got a job with the  
10 Commonwealth of Pennsylvania.  
11 Q So you began your employment with the  
12 DEP in 1995?  
13 A 1994.  
14 Q '84?  
15 A 1994.  
16 Q When you hired on with the DEP, what  
17 division of the DEP did you hire on with?  
18 A Organic.  
19 Q So when you hired on with the DEP,  
20 you were working for the Bureau of Labs?  
21 A That is correct.  
22 Q And within the Bureau of Labs, you  
23 were working in the organic division?  
24 A Organic section, correct.  
25 Q What was your job title when you were

25

1 first hired?  
2 A Chemistry technician.  
3 Q What were your primary job  
4 responsibilities?  
5 A Sample preparation.  
6 Q How long did you hold that position  
7 as sample prep technician?  
8 A One year.  
9 Q What was the next position you held?  
10 A Chemist 1.  
11 Q What is that at the DEP?  
12 A That's entry level position for a  
13 chemist. They prepare samples, and they also  
14 analyze the samples.  
15 Q How many levels of chemists are there  
16 in the DEP's network?  
17 A Four.  
18 Q So Chemist 1 through 4?  
19 A Correct.  
20 Q How long did you hold that position?  
21 A About two, three years. I don't  
22 remember exactly, but about two, three years.  
23 Q And those two, three years as Chemist  
24 1, that was always in the organic division?  
25 A That is correct.

7 (Pages 22 to 25)

<p style="text-align: right;">26</p> <p>1 Q What was the position you held after 2 that?</p> <p>3 A <b>Chemist 2.</b></p> <p>4 Q And how long did you hold that 5 position?</p> <p>6 A <b>Less than six months, I believe.</b></p> <p>7 Q I'm assuming, but let me ask you the 8 question, Chemist 1, 2, 3, 4, those are 9 promotions, correct?</p> <p>10 A <b>That is correct.</b></p> <p>11 Q So Chemist 2, how does the job 12 responsibilities differ than Chemist 1 under the 13 DEP hierarchy?</p> <p>14 A <b>Chemist 2, mainly they can do 15 method development work. Analyst 2, sample 16 analysis. A Chemist 1, they don't do method 17 development work.</b></p> <p>18 Q And what's all involved in method 19 development work?</p> <p>20 A <b>If they have a new method that we 21 want to implement, the Chemist 2 works on 22 implementing EPA methods in the lab that we 23 normally don't do, so they work on the 24 implementing the method. Or there is some new 25 method out there and we would like to use this</b></p>	<p style="text-align: right;">28</p> <p>1 might have to be used to implement that method. 2 Anything else?</p> <p>3 A <b>We do research, like, if there is 4 any method out there, if somebody's already 5 using, we can use that information in order to 6 double up a new method, like a research kind of 7 work, and then go from there. That's just the 8 beginning of the procedure.</b></p> <p>9 Q And then with implementing a new 10 method, does it also require training of the staff 11 on how to analyze or how to prep samples under 12 this new method that may be implemented?</p> <p>13 A <b>Can you rephrase that question?</b></p> <p>14 Q Sure. As part of this method, when 15 you are implementing a new method in the lab, does 16 it also require that staff members of the lab be 17 trained in that method in terms of how to prep 18 samples or run the actual method itself?</p> <p>19 A <b>Once the method is doubled up, 20 then yes, we do train the staff members how to 21 prep, how to use that new method in order to 22 analyze samples after the method is doubled up 23 completely. There will be training.</b></p> <p>24 Q So you said that happens with -- 25 that's one of the responsibilities of a Chemist 2</p>
<p style="text-align: right;">27</p> <p>1 <b>in our lab, they try to come up with a new 2 method also, like entirely new method, they 3 work on developing new method based on the 4 information, the research kind of work.</b></p> <p>5 Q And so when you're going to 6 implement, let's say, a new EPA method, what does 7 the Chemist 2 do to implement that in the actual 8 lab? Is there training that goes on? What goes 9 on in order to implement that new method?</p> <p>10 A <b>It's kind of a research that they 11 look into the type of instruments they need in 12 order to develop the method. They look into 13 the reagents they need.</b></p> <p>14 <b>(Phone interruption.)</b> 15 <b>(Brief recess.)</b> 16 BY MS. KENDRA SMITH:</p> <p>17 Q Before we took the break, ma'am, we 18 were talking about the DEP implementing a new 19 method to be used in the lab. And you were 20 describing to me as to what occurs when you do 21 that.</p> <p>22 And you had indicated to me that, 23 first of all, you are going to look to see what 24 specific instruments need to be acquired in order 25 to implement that method and also what reagents</p>	<p style="text-align: right;">29</p> <p>1 in the DEP. And you said that you held that 2 position for only about six months. What position 3 did you hold next?</p> <p>4 A <b>Chemist 3.</b></p> <p>5 Q How does a position of a Chemist 3 6 versus a Chemist 2 differ?</p> <p>7 A <b>Chemist 3 is a working supervisor. 8 So there is some management responsibility 9 along with the working in the lab.</b></p> <p>10 Q And typically how many people does a 11 Chemist 3 manage?</p> <p>12 A <b>It depends on the section they 13 work in. So anywhere between two to five.</b></p> <p>14 Q In managing those two to five people 15 depending on the section that they're in, are they 16 responsible for reviewing those people's actual 17 work in the lab?</p> <p>18 A <b>The job responsibility for the 19 Chemist 3 is to -- management work, like 20 approving leave and then analytical work.</b></p> <p>21 <b>As far as the sample analysis, the 22 Chemist 1 or 2, whoever there's supervising, 23 they can go to Chemist 3 or the supervisor if 24 they have any questions about the sample or 25 sample data or anything related to the sample.</b></p>

<p style="text-align: right;">30</p> <p>1 That's the first contact, the supervisor. 2 Immediate supervisor. 3 Q Besides supervising, is there 4 anything else in terms of job responsibility that 5 differs between Chemist 2 and Chemist 3? 6 A Can you please repeat that 7 question. 8 Q Sure. Other than supervising, people 9 having a supervisory role, is there any other 10 differences between a Chemist 3 and a Chemist 2 in 11 the DEP hierarchy? 12 A No. 13 Q How long did you hold that position 14 as Chemist 3? 15 A About five, six years. 16 Q Then what was the next position you 17 held? 18 A Chemist 4. 19 Q How does the responsibilities of a 20 Chemist 4 differ from a Chemist 3? 21 A Chemist 4 is section chief 22 position. So that's head of the section, 23 analytical section. 24 Q What are their particular job 25 responsibilities as Chemist 4?</p>	<p style="text-align: right;">32</p> <p>1 A Radiation measurement section, air 2 chemistry and gravimetric section, 3 microbiology, trace metal analysis, automated 4 analysis, and organic chemistry. 5 Q And how long have you held your 6 current position as division director? 7 A About four years now. More than 8 three-and-a-half years. 9 Q Have we now covered every position 10 that you have held with the DEP? 11 A (Witness moved head affirmatively.) 12 Q You have to answer out loud. 13 A I'm sorry. Yes. 14 Q From your work history, I'm correct 15 in stating that the DEP Bureau of Labs is the only 16 employer you have ever had in the United States? 17 A That is not correct. 18 Q Okay. 19 A I worked in a private lab. 20 Q I'm sorry, yes. You had worked in 21 Johnston Lab for one year? 22 A Correct. 23 Q Approximately? 24 A Correct. 25 Q In your current position as division</p>
<p style="text-align: right;">31</p> <p>1 A They have more number of analysts 2 or Chemist 1 and 2 reports. Chemist 3 reports 3 to Chemist 4. So they have a large number of 4 people and larger -- because Section 2, to 5 manage. That's the respons -- management of 6 analytical section. 7 Q And for the Chemist 4 position, what 8 section were you the head of as a Chemist 4? 9 A I was head of -- for radiation 10 measurement section and also automated analysis 11 section. 12 Q How long did you hold the position of 13 Chemist 4? 14 A About two, three years. About two 15 to three years. 16 Q When you were the head of the 17 analytical, those two analytical sections, how 18 many people did you supervise? 19 A Ten to twelve people. 20 Q After Chemist 4, what position did 21 you hold? 22 A My current position, division 23 director, as a technical director. I oversight 24 of six analytical sections. 25 Q What analytical sections are those?</p>	<p style="text-align: right;">33</p> <p>1 director, can you give me an idea on a day-to-day 2 basis what you spend the majority of your time 3 doing? 4 A So six analytical sections that I 5 have oversight on, the six section chiefs 6 reports to me. So on a day-to-day basis, I 7 make sure I -- I do all management work in 8 analytical sections. 9 So if there are any problems or 10 any questions or any new development, then I 11 have communications with my section chiefs. 12 They approach to me, and we discuss about our 13 lab work. 14 That's normally -- and then if I 15 look into the workload, like how -- if there's 16 any workload. I also look into any instrument 17 problem, major instrument problems, if they 18 have any that they cannot resolve, not on a 19 daily basis, they resolve their problem, but if 20 something that they cannot resolve, we talk 21 about it and then I try to resolve those issues. 22 Any new instruments they need to 23 purchase, budget, about the instruments they 24 need to purchase, any reagents or any 25 analytical needs they may have, I review those</p>

<p style="text-align: right;">34</p> <p>1 requests and process them, any capital 2 equipment. So we talk about it and we -- we 3 also look into any analytical methods that 4 they're working on, if they're having problems 5 or things like that. 6 Q And who is your direct supervisor? 7 A My direct supervisor is Martina 8 McGarvey. She's the bureau director. 9 Q Can you tell me, in the positions 10 that you have held with the DEP, Chemist 1, 11 Chemist 2, 3, 4, and even in your current 12 position, have you received training from the DEP 13 about how to do your job in particular with regard 14 to sample analysis? 15 A Yes. 16 Q And in particular, when you first 17 started with the DEP, what type of training did 18 you receive with regard to testing sample analysis 19 or doing sample analysis? 20 A Routinely, what they provide is, 21 like, you work with an experienced chemist who 22 has experience in preparation of samples. And 23 then what -- they give you the procedure that 24 you need to follow, written procedure. 25 Then you observe the experienced</p>	<p style="text-align: right;">36</p> <p>1 described, does that occur at every level, Chemist 2 1, Chemist 2, Chemist 3, Chemist 4? 3 A That is correct. 4 Q And I'm going to assume, and correct 5 me if I'm wrong, but that training is tweaked to 6 the level of experience as you go up to Chemist 4? 7 A That's standard procedure, that 8 you work with unknown -- you work with an 9 experienced person, you have a hands-on 10 training, and then you -- once you establish 11 you have acceptable results for your train -- 12 standards that you work with, then you're 13 allowed to work with unknown samples. That's -- 14 Q During the course of the training 15 that you have done to hold the position Chemist 1, 16 Chemist 2, Chemist 3, Chemist 4 and your current 17 position, have you ever had training outside of 18 the DEP? For instance, with the EPA? 19 A For the sample analysis? 20 Q For any part. You described all of 21 the training that you go through in each level. 22 So whatever it may be. Do you -- have you ever 23 had any training outside of the DEP? 24 A Yes. 25 Q For what?</p>
<p style="text-align: right;">35</p> <p>1 chemist that they have done that work before, 2 so you observe them go doing that procedure. 3 And then you do hands-on training, hands-on 4 training, like preparation. And you just work 5 with the standards and to see, make sure that 6 you follow the procedure and you get acceptable 7 results for with using those standards. 8 And you document those test for 9 demonstration their ability, you see, to make 10 sure that the procedure that you are going to 11 use, you have complete training on that and you 12 have acceptable results. 13 Once you do that, you also analyze 14 an unknown quality control sample or unknown 15 sample that you don't know what the 16 concentration is. 17 Somebody else prepares it and then 18 you get acceptable results, that means you get 19 full training of understanding of procedure, 20 you have had an opportunity of observing 21 somebody doing that procedure, and also then 22 you have opportunity to do hands-on training 23 prior to you're allowed to work with unknown 24 samples. 25 Q And that training that you just</p>	<p style="text-align: right;">37</p> <p>1 A I attend seminars. 2 Q And is that a requirement of the job 3 description Chemist 1, Chemist 2, 3, 4 and your 4 current position that you have to attend seminars 5 outside of the DEP for training? 6 A That's not a requirement. 7 Q And what type of seminars have you 8 attended outside of the DEP? 9 A I don't remember right now, but 10 there's so many, so many years now, so. 11 Q Sure. Do you remember the topics of 12 any that you attended? 13 A Some of them are analytical 14 seminars, and some of them are for the 15 leadership conferences. 16 Q With regard to any of the analytical 17 seminars that you have attended outside the DEP, 18 have any of them been specifically on the topic of 19 water sample analysis for water contamination due 20 to Marcellus drilling operations? 21 A No. 22 Q Have you ever attended any seminars 23 with regard to Marcellus drilling operations? 24 A No. 25 Q Not one?</p>

<p style="text-align: right;">38</p> <p>1 A No.</p> <p>2 Q With the leadership seminars that you</p> <p>3 have gone to, have any of those leadership</p> <p>4 seminars been sponsored by any oil and gas</p> <p>5 industry companies that you are aware of?</p> <p>6 A No.</p> <p>7 Q No, you're not aware; or no, none</p> <p>8 were?</p> <p>9 A None of them were.</p> <p>10 Q Were any of the other seminars,</p> <p>11 analytical seminars that you attended, sponsored</p> <p>12 by any oil and gas companies?</p> <p>13 A No.</p> <p>14 Q These seminars that you attended, who</p> <p>15 put them on outside of the DEP? Who was</p> <p>16 sponsoring them or putting them on?</p> <p>17 A Well, we -- it's part of the</p> <p>18 training. So many of the seminars, we pay the</p> <p>19 money and we attend the seminars so that we</p> <p>20 learn from it.</p> <p>21 Leadership seminars, many of them</p> <p>22 are -- DEP provides the leadership seminars.</p> <p>23 And I attend them just as my career development.</p> <p>24 We pay for some -- most of our seminars that we</p> <p>25 go to, was a part of training.</p>	<p style="text-align: right;">40</p> <p>1 Q With regard to the different</p> <p>2 positions that you have held at the DEP starting</p> <p>3 with the Chemist 1 all the way up to your current</p> <p>4 position, do those positions -- have those</p> <p>5 positions ever required you to work with water</p> <p>6 sample collectors actually in the field?</p> <p>7 A No.</p> <p>8 Q Do you know, as a result of your</p> <p>9 current position, whether or not the people for</p> <p>10 the DEP who collect the water samples in the field</p> <p>11 are trained on how to do that?</p> <p>12 A I don't know.</p> <p>13 Q Do you know who would know that at</p> <p>14 the DEP?</p> <p>15 A I don't know.</p> <p>16 Q You don't know who trains the water --</p> <p>17 A No.</p> <p>18 Q -- sample collectors?</p> <p>19 A No.</p> <p>20 Q During the course of your career with</p> <p>21 the DEP, have you ever been in any of those</p> <p>22 positions where it's ever been your job to</p> <p>23 interpret or otherwise determine why a particular</p> <p>24 water sample is contaminated and how it got that</p> <p>25 way?</p>
<p style="text-align: right;">39</p> <p>1 Q What I'm trying to understand, and I</p> <p>2 understand going to the leadership ones within the</p> <p>3 DEP, as your career has advanced in the DEP, but</p> <p>4 what I'm -- my question centers around is, have</p> <p>5 you attended any seminars outside of the DEP? For</p> <p>6 instance, seminars given by the EPA or some other</p> <p>7 group where you might learn additional things with</p> <p>8 regard to, let's say, analytical techniques or</p> <p>9 testing?</p> <p>10 A Let me think about it. Yes, I</p> <p>11 have attended EPA seminars. But long time</p> <p>12 back. I mean, I don't remember any specific of</p> <p>13 that.</p> <p>14 Q You don't remember generally a topic</p> <p>15 that you went to an EPA seminar on?</p> <p>16 A No, I don't.</p> <p>17 Q Do you remember how recent the last</p> <p>18 one was?</p> <p>19 A I'll tell you very honestly, the</p> <p>20 analytical seminars, I have been in this</p> <p>21 position for so long, most of my seminars</p> <p>22 recently and last several years is mostly like</p> <p>23 leadership-type of seminars. So I don't</p> <p>24 remember any analytical seminars that I have</p> <p>25 attended.</p>	<p style="text-align: right;">41</p> <p>1 A No.</p> <p>2 Q Do you know where that determination,</p> <p>3 where that would fall, like what department would</p> <p>4 actually do that?</p> <p>5 A I don't know.</p> <p>6 Q You work for the DEP in the Bureau of</p> <p>7 Labs, correct?</p> <p>8 A That is correct.</p> <p>9 Q The DEP Bureau of Labs, am I correct</p> <p>10 that there is an actual lab at the DEP?</p> <p>11 A Yes, there's an actual lab.</p> <p>12 Q And is that the lab that you work at?</p> <p>13 A That is correct.</p> <p>14 Q And so just so that I'm straight, the</p> <p>15 DEP Bureau of Labs, within the DEP itself, there's</p> <p>16 only one lab, correct?</p> <p>17 A That is correct.</p> <p>18 Q And so under the umbrella of Bureau</p> <p>19 of Labs, does that cover the other laboratories in</p> <p>20 the state of Pennsylvania that have accreditation</p> <p>21 through the DEP in their Environmental Lab</p> <p>22 Accreditation Act?</p> <p>23 MR. WATLING: Objection as to form,</p> <p>24 vague and ambiguous. You can answer if you think</p> <p>25 you understand.</p>

<p style="text-align: right;">42</p> <p>1 A I did not understand that question.  2 BY MS. KENDRA SMITH:  3 Q Okay. Let me see if I can do it this  4 way. The Bureau -- it's Bureau of Labs, or  5 Laboratories, correct?  6 A That is correct.  7 Q But there's only one in the DEP,  8 correct?  9 A That is correct.  10 Q Do you know why it's plural then,  11 Laboratories, Bureau of Laboratories?  12 A I don't know why.  13 Q And I guess that that spawned my  14 question, are you familiar with and in your  15 position, current position or any position that  16 you have had with the DEP, are you familiar with  17 the Pennsylvania Environmental Lab Accreditation  18 Act?  19 A Yes.  20 Q Are you familiar that labs in  21 Pennsylvania are accredited under that act?  22 A That is correct.  23 Q And is the Pennsylvania DEP the  24 accreditation body for the labs within  25 Pennsylvania?</p>	<p style="text-align: right;">44</p> <p>1 correct? Or national?  2 A Yes. That's a national  3 accreditation.  4 Q As the DEP is the overseer of the  5 Pennsylvania labs that are accredited under the  6 Lab Accreditation Act, is the NELAP the overseer  7 of the Bureau of Labs for the Pennsylvania DEP in  8 terms of their accreditation?  9 A Can you -- I don't understand the  10 question. Can you rephrase it.  11 Q Sure. So what I'm trying to  12 understand is, the DEP operates a single lab in  13 the state of Pennsylvania.  14 A Yes.  15 Q And what I would like to know is, who  16 oversees the Pennsylvania DEP lab, the Bureau of  17 Labs? What body is that?  18 A Our accreditation is from New  19 Jersey NELAP.  20 MR. WATLING: Objection, vague and  21 ambiguous as to the question oversee. However,  22 the witness answered, it's fine.  23 A I would like to make it clear, the  24 Bureau of Laboratories has NELAP accreditation  25 certification through New Jersey NELAP.</p>
<p style="text-align: right;">43</p> <p>1 A Um-hmm, yes.  2 Q And in any of your positions, has it  3 ever been your job responsibility to be one of the  4 individuals at the Pennsylvania DEP that  5 determines whether a lab gets accreditation or not  6 or gets their accreditation taken away from them?  7 A Can you repeat that question.  8 Q Sure.  9 MS. KENDRA SMITH: Can you read that  10 back.  11 A I'm sorry.  12 (Question read.)  13 A The answer is no.  14 BY MS. KENDRA SMITH:  15 Q And, dumb question, but the Bureau of  16 Labs for the DEP, they're an environmental lab,  17 correct?  18 A That is correct.  19 Q And the Bureau of Labs for the DEP  20 holds an accreditation through the NELAP as an  21 environmental lab, correct?  22 A NELAP, yes.  23 Q NELAP, okay. And that is the Federal  24 body of lab accreditation for various  25 accreditations, but also for environmental,</p>	<p style="text-align: right;">45</p> <p>1 BY MS. KENDRA SMITH:  2 Q Okay. And so with the New Jersey  3 NELAP, they're the ones that check to make sure  4 that the Bureau of Labs is doing their job  5 pursuant to the protocol, procedures and policies  6 implemented by NELAP, correct?  7 MR. WATLING: Objection, vague and  8 ambiguous. Doing their job. You can answer to  9 the extent you would like to.  10 Would you like her to re-ask the  11 question, have it read?  12 A Yes, please.  13 MS. KENDRA SMITH: If you could  14 read that back. Thank you.  15 (Question read.)  16 MR. WATLING: We objected as to  17 form. Vague and ambiguous. Quote, doing their  18 job, unquote.  19 A The New Jersey NELAP makes sure  20 that methods that we are certified for, we  21 follow the procedures described in the method  22 and follow the method requirements, NELAP  23 requirements, and that's all they do.  24 BY MS. KENDRA SMITH:  25 Q And currently, well, let me ask you</p>



<p>46</p> <p>1 this, currently, does the Bureau of Labs have 2 accreditation as an environmental lab through NJ 3 NELAP? 4 <b>A That is correct.</b> 5 Q Do you know since when the department 6 has had that accreditation? 7 <b>A 2008.</b> 8 Q 2008. Prior to 2008, do you know 9 where it was that the Bureau of Labs at the DEP 10 would send a sample out for analysis that required 11 an environmental -- 12 <b>A We were accredited by EPA.</b> 13 Q Prior to? 14 <b>A Prior to.</b> 15 Q Do you know how long the Bureau of 16 Labs had that accreditation through the EPA? 17 <b>A EPA provided accreditation for</b> 18 <b>drinking water samples. And since I have been</b> 19 <b>employed, we have EPA certification. I don't</b> 20 <b>know prior to that.</b> 21 Q The EPA certification that the Bureau 22 of Labs had prior to 2008 for drinking water, what 23 specifically did that allow the Bureau of Labs to 24 test drinking water for? 25 <b>A For drinking -- can you repeat</b></p>	<p>48</p> <p>1 <b>water.</b> 2 Q So under the EPA-approved method for 3 drinking water, prior to 2008, when the DEP had 4 that certification, it allowed you to test, 5 pursuant to that approved method, drinking water, 6 correct? 7 <b>A Can you repeat that?</b> 8 Q Let me see if I can do it by an 9 example. 10 <b>A Okay.</b> 11 Q For instance, prior to 2008 when you 12 had the EPA accreditation for the Bureau of Labs, 13 was the Bureau of Labs able to test for ethylene 14 glycol in drinking water? Pursuant to the 15 EPA-approved method. 16 <b>A Yes.</b> 17 Q Did the Bureau have the capacity to 18 do that at that time? That you're aware of. 19 <b>A I'm not aware of it.</b> 20 Q So when in 2008 it went to NJ NELAP, 21 did any of the requirements to be accredited under 22 NJ NELAP change from the EPA accreditation that 23 the lab had prior to? 24 <b>A NELAP has its own requirement. It</b> 25 <b>required more documentation. The difference</b></p>
<p>47</p> <p>1 <b>that question?</b> 2 Q Sure. The EPA certification that the 3 Bureau of Labs had prior to 2008 for drinking 4 water, what did that certification allow the 5 Bureau of Labs to test drinking water for? 6 <b>A Any -- I don't understand your</b> 7 <b>question. Can you please rephrase it.</b> 8 Q Sure. With the EPA's certification 9 prior to 2008 to the Bureau of Labs for drinking 10 water, if you -- the Bureau of Labs got a sample 11 of drinking water in, what did that certification 12 allow the Bureau of Labs to test it for? 13 MR. WATLING: Objection, vague and 14 ambiguous as to the word allow. You may answer 15 the question. 16 <b>A Bureau of Labs, when they receive</b> 17 <b>a drinking water sample, the Bureau of Labs</b> 18 <b>follow drinking water -- EPA-approved drinking</b> 19 <b>water method to analyze that sample.</b> 20 BY MS. KENDRA SMITH: 21 Q So you would follow the EPA method in 22 terms of reporting drinking water that would 23 exceed any -- 24 <b>A EPA-approved method, not just EPA</b> 25 <b>method. EPA-approved method for drinking</b></p>	<p>49</p> <p>1 <b>between NELAP requirement -- NELAP offers</b> 2 <b>certification for various other matrixes where</b> 3 <b>EPA offered certification only for drinking</b> 4 <b>water.</b> 5 <b>And that's the reason we went to</b> 6 <b>NELAP certification, so that we can accredit</b> 7 <b>for drinking water as well as other matrix.</b> 8 Q With regard to the NJ NELAP 9 accreditation that the Bureau of Labs has held 10 since 2008, do they have specific regulations that 11 have to be followed when you're analyzing a 12 sample, a water sample, let's say? 13 MR. WATLING: Objection as to form. 14 Vague and ambiguous. Regulations. You may answer 15 the question. 16 <b>A Can you repeat that question,</b> 17 <b>please, for me.</b> 18 <b>(Question read.)</b> 19 <b>A That's correct, yes.</b> 20 BY MS. KENDRA SMITH: 21 Q And so if those regulations aren't 22 followed and a water sample is done that doesn't 23 follow those regulations, would the Bureau of Labs 24 risk their accreditation through NJ NELAP as a 25 result of that?</p>

50

1 A Yes.  
2 MR. WATLING: Continuing objection  
3 as to the use of the word regulations.  
4 Objection as to form, vague and ambiguous;  
5 however, you can answer.  
6 BY MS. KENDRA SMITH:  
7 Q I'm sorry, I thought you answered  
8 yes, is that correct?  
9 A We have to follow NELAP  
10 regulations. And also we have to follow the  
11 reference method requirements in order to  
12 analyze samples.  
13 Q If you don't do that, the Bureau of  
14 Labs would risk their accreditation through New  
15 Jersey NELAP, correct?  
16 A We're supposed to follow all rules  
17 and regulations in order to analyze samples.  
18 Q Right. And if you don't, the  
19 accreditation of the Bureau of Labs would be at  
20 risk, correct?  
21 A That's correct.  
22 Q One of the requirements under the NJ  
23 NELAP for accreditation for the Bureau of Labs and  
24 anyone else getting accreditation under them is  
25 that laboratory samples have to be reported

51

1 accurately, correct?  
2 A That's correct.  
3 Q And the Bureau of Labs, under the NJ  
4 NELAP accreditation, cannot submit false analysis,  
5 correct?  
6 A That's correct.  
7 Q And the, under NJ NELAP  
8 accreditation, the Bureau of Labs cannot submit  
9 misleading analysis, correct?  
10 MR. WATLING: Objection as to form.  
11 Vague and ambiguous. The word false, misleading  
12 in this context.  
13 BY MS. KENDRA SMITH:  
14 Q Let me see if I can clear it up this  
15 way. Under the NJ NELAP accreditation, the Bureau  
16 of Labs cannot report incomplete analysis,  
17 correct?  
18 A Bureau of Laboratories reports to  
19 us once a sample is completed.  
20 Q Right. I understand that. But as  
21 part of the accreditation, when you report those  
22 samples, you're reporting that they comply with NJ  
23 NELAP, correct?  
24 A When we report results, we follow  
25 the reference method and also NELAP

52

1 requirements. And samples gets reported once  
2 they're completed to our client.  
3 Q Let me ask you this. Since you have  
4 been employed with the DEP and the DEP has  
5 certification under NJ NELAP, has there ever been  
6 an instance where the Bureau of Labs has been  
7 cited by NJ NELAP for not following their  
8 procedures?  
9 MR. WATLING: Objection as to the  
10 form. Vague and ambiguous. Cited.  
11 MS. KENDRA SMITH: Rick, I will grant  
12 you a continuing object to all of that if you want  
13 so that you don't have to keep doing it. Just so  
14 we can move it along.  
15 MR. WATLING: That's fine.  
16 MS. KENDRA SMITH: Is that all right?  
17 MR. WATLING: We are talking about  
18 words in particular that may have a context  
19 outside of laboratories, such as cited, false,  
20 misleading, and may not have similar context for  
21 her questions. So I will try to be efficient in  
22 my objections when I hear those words.  
23 BY MS. KENDRA SMITH:  
24 Q Okay, go ahead. Do you need it read  
25 back?

53

1 A I'll answer my question, and then  
2 I'll take a break. I will answer this  
3 question, and then I will take a break.  
4 Q Do you need it read back?  
5 A Yes.  
6 MS. KENDRA SMITH: Could you  
7 please read it back.  
8 (Question read.)  
9 A When NJ NELAP comes for an on-site  
10 audit, they may find -- they may have found  
11 some. . . I'm trying to find the word.  
12 They have -- when they come for an  
13 on-site audit, they go over the different  
14 procedures, they have some questions to the  
15 analyst, and they may have some either findings  
16 or suggestions, yes, they have done that.  
17 When they come to an on site and  
18 they -- when they provide us the report, they  
19 say that, well, for this particular method,  
20 this is the requirement, and this is what we  
21 think should be done. And that has happened  
22 when on site happens.  
23 BY MS. KENDRA SMITH:  
24 Q Do you know how many times that's  
25 happened?

<p>54</p> <p>1 A We had so far three on site -- no, 2 we had two on site and third is due, I'm sorry. 3 Q I'm sorry, two on site? 4 A We had two on sites since we got 5 NELAP accreditation. 6 Q What were they for? 7 A There's on site part of the 8 certification. 9 Q What did they find that the Bureau of 10 Labs was doing wrong or not pursuant to their 11 procedures? 12 A I don't remember. I'm just 13 telling you the procedure that normally 14 happens. And so when they come for on site, 15 they review all the methods that we are -- 16 request for the certification. 17 They talk to the analysts, review 18 SOP, standard operating procedures, they 19 interview the analyst. If they find that 20 there's something we are missing or something 21 we supposed to do or, they might put as a 22 finding, they might put as suggestions. That's 23 a normal process. 24 And they just put -- keep -- put 25 that in the report, that that's what happened.</p>	<p>56</p> <p>1 Q The two on-site visits that NJ NELAP 2 made where they had recommendations and 3 suggestions for the Bureau of Labs to change on 4 their procedures or follow up on their procedures, 5 when those recommendations and suggestions were 6 made, who did NJ NELAP report them to at the DEP? 7 A Can you explain a little bit more 8 what your question is? 9 Q You had indicated, I asked you 10 whether or not there was ever any problems where 11 NJ NELAP came on site and said these are our 12 procedures, you need to change this to follow our 13 procedure, you said you recall two. 14 And what I'm asking you is, with 15 those two on-site visits when NJ NELAP made 16 recommendations for procedures for the Bureau of 17 Labs to follow, who did those recommendations go 18 to at the Bureau of Labs or within the DEP? 19 A We -- Bureau of Labs, our 20 directors report from NJ DEP after the on site. 21 That's called on-site report. And -- 22 Q So that went to your supervisor? 23 A That went to my supervisor. 24 Q Then once it went to your supervisor, 25 who did she give it to to implement those changes</p>
<p>55</p> <p>1 But I don't remember any specifics right now. 2 Q For those two times where they cited 3 the lab -- is that the proper term, cited the lab? 4 A No, they came for on-site audit. 5 They came for an audit. 6 Q Right. And when they did the audit 7 and they found that the Bureau of Labs was not 8 following their procedure, those two times, where 9 they made the suggestions on what to change? 10 Did -- 11 A I may -- 12 MR. WATLING: I'm going to accept 13 the continuing objection as to form, vague and 14 ambiguous, to allow this line of questioning to 15 continue. 16 I'd like, for the record, that 17 some of the terms such as cite, misleading, 18 false, may not have an equivalent in a 19 laboratory context. 20 We will allow the line of questioning 21 to continue. I will attempt not to object on 22 every case, but to the extent the transcript 23 shows that this has developed an inaccurate 24 record, we will highlight that in the future. 25 BY MS. KENDRA SMITH:</p>	<p>57</p> <p>1 in the procedures that NJ NELAP wanted? 2 A Then she goes -- talks to me, our 3 quality assurance manager, and also we talk to 4 individual section chiefs, the six sections 5 that we have, those section chiefs, we make 6 them aware of for any suggestions or findings 7 if it is related to their section. 8 Q And so these two times where 9 suggestions and findings were made that were 10 filtered down to you and then to the other 11 department heads -- 12 A Correct. 13 Q -- you don't recall what that was 14 about? Either one of them? 15 A Not specifically. 16 Q Do you know generally what they were 17 about? 18 A It could be interpretation of the 19 reference method, that when we follow the 20 reference method, we may have misinterpreted 21 that we have to run six calibrations, instead 22 we done five, or -- and they say no, no, you 23 have to run six, something like -- something 24 like glassware cleaning that -- I'm just giving 25 examples, it's not particularly that happened.</p>

<p style="text-align: right;">58</p> <p>1 <b>I don't remember --</b>  2 Q That's what I'm interested in. I'm  3 interested in these two particular on-site visits,  4 what they were about when they were then filtered  5 down to you to implement.  6 A <b>Let me think about it. Give me a</b>  7 <b>few minutes. I need to. . . I don't remember</b>  8 <b>any report. It happened two years back, so I</b>  9 <b>don't remember any findings.</b>  10 Q Two years back, so about 2010, would  11 that be about right?  12 A <b>Yeah. We had the on site. Yes.</b>  13 <b>I don't remember the report what we had.</b>  14 Q I'm going to --  15 A <b>There weren't that many.</b>  16 MS. KENDRA SMITH: I'm going to  17 make a request on the record for those two --  18 BY MS. KENDRA SMITH:  19 Q What did you call them?  20 A <b>On-site report.</b>  21 MS. KENDRA SMITH: On-site reports  22 that are around 2010. And we will follow up  23 with a formal request as well.  24 MR. WATLING: We will respond to  25 the formal request.</p>	<p style="text-align: right;">60</p> <p>1 would like to go off the record and we can discuss  2 with counsel. Is that acceptable? Why are we  3 talking about her citizenship?  4 MS. KENDRA SMITH: We're on. It's  5 just a question that I forgot to ask that I  6 formally ask when I have someone who is from  7 another country. I ask it of doctors and  8 everyone.  9 MR. JOHN SMITH: She's answered.  10 MS. KENDRA SMITH: She's answered.  11 She has dual citizenship.  12 MR. WATLING: I think that's enough  13 questioning on that issue.  14 MR. JOHN SMITH: It's just a question  15 of when, right?  16 BY MS. KENDRA SMITH:  17 Q Yeah, it's just when did you obtain  18 the dual citizenship?  19 A <b>I obtained citizenship of the</b>  20 <b>United States first.</b>  21 Q Do you know when you did that?  22 A <b>I don't remember right now. Many</b>  23 <b>years ago.</b>  24 Q Going back to the NJ NELAP  25 accreditation that the Bureau of Labs holds, how</p>
<p style="text-align: right;">59</p> <p>1 MR. JOHN SMITH: She asked for a  2 break too.  3 A <b>Yes, I would like to take a break.</b>  4 MR. WATLING: Are we off the  5 record?  6 MS. KENDRA SMITH: Yes.  7 (Brief recess.)  8 BY MS. KENDRA SMITH:  9 Q Before we took a break, we were  10 talking about the NJ NELAP certification. I  11 wanted to go back.  12 I forgot to ask you when I was asking  13 you about your education and everything in India,  14 when you came over to the United States, did you  15 obtain -- are you a U.S. citizen, are you a dual  16 citizen of India and the United States?  17 A <b>Currently, I'm a dual citizen.</b>  18 Q Dual citizen. And did you obtain  19 that citizenship when you came back?  20 MR. WATLING: Objection.  21 BY MS. KENDRA SMITH:  22 Q You said you were here for a year,  23 and then you left, and then you came back to the  24 United States.  25 MR. WATLING: Objection here. I</p>	<p style="text-align: right;">61</p> <p>1 is a violation within the lab of NJ NELAP  2 procedures reported?  3 So, for instance, if you're going  4 through, and a Chemist 1 sees that on a particular  5 sample, NJ NELAP procedures were not followed, how  6 would that individual report that to NJ NELAP?  7 A <b>That individual report to the</b>  8 <b>section chief.</b>  9 Q How would the section chief report  10 that to NJ NELAP?  11 A <b>Let me explain you the process</b>  12 <b>that we follow.</b>  13 Q Okay.  14 A <b>For any analysis we do, if the</b>  15 <b>procedure is not followed or a mistake happens</b>  16 <b>by an analyst and somebody, then they find out,</b>  17 <b>they talk to the section chief.</b>  18 <b>The section chief does the</b>  19 <b>investigation, they counsel the analyst, they</b>  20 <b>make the corrective action.</b>  21 <b>They also make me aware of it if</b>  22 <b>there is a question or there's a -- somebody</b>  23 <b>made a mistake, like that, if it affect</b>  24 <b>certification.</b>  25 <b>Then they say this is what</b></p>

<p style="text-align: right;">62</p> <p>1 happened, this is what the investigation is, 2 this is the corrective action. 3 The section chief make sure that 4 corrective action is implemented, and they 5 follow up to make sure it continues with the 6 correct implementation of whatever. 7 Q So is it the section chief that 8 alerts NJ NELAP of a violation of their procedure 9 within the lab? 10 A We do not need to alert NJ NELAP. 11 The section chief informs the quality assurance 12 manager, Bureau of Labs quality – and quality 13 assurance manager determines what the next step 14 is to take. 15 Q So is it your understanding that it's 16 within the discretion of the quality assurance 17 bureau chief whether or not to report when an NJ 18 NELAP procedure is not followed within the Bureau 19 of Labs? 20 A Quality assurance managers make 21 sure that whatever the NELAP requirements are, 22 are followed. If the requirement says that 23 they need to report this to NELAP, he will 24 follow those procedures. 25 Q Have you, in your position, ever</p>	<p style="text-align: right;">64</p> <p>1 A No. 2 Q Why not? 3 A We make sure that if we find – if 4 we find a problem – when we find a problem, we 5 make sure we do corrective actions, and we 6 implement that right away. 7 NELAP New Jersey has a right to 8 come any time and ask questions, not just for 9 the on site. And then we can – we are – we 10 can answer their questions. 11 Q Is it your understanding under the 12 Bureau of Labs' accreditation with NJ NELAP that 13 the lab does not have to self report errors in not 14 following procedure, NJ NELAP procedure, is that 15 your understanding? 16 A Can you repeat that question? 17 Q Sure. Is it your understanding under 18 the accreditation that the Bureau of Labs' holds 19 with NJ NELAP that NELAP does not require the 20 Bureau of Labs to self report when it finds that 21 it has not followed NJ NELAP procedure? 22 A No, that's not my understanding. 23 Q So your understanding is that the 24 Bureau of Labs does have to self report when it 25 doesn't follow NJ NELAP procedures, correct?</p>
<p style="text-align: right;">63</p> <p>1 reported to a quality assurance chief a procedure 2 within the Bureau of Labs that did not follow the 3 NJ NELAP procedures? 4 A Yes. 5 Q For what? 6 A Part of NELAP requirement is to 7 document everything of that process that we do. 8 And there was one procedure in which analyst 9 followed the procedure, but did not documented 10 or missed to document some of the document that 11 he supposed to documented. 12 And so I talked to the quality 13 assurance manager, I said this is what is 14 required by NELAP that's supposed to be 15 documented, and this person did not do it. So 16 then quality assurance manager was informed. 17 That's so he can do his own 18 investigation and so that we can implement the 19 corrective actions so we don't – that person 20 is not doing it, let's make sure that he does 21 it. 22 Q And as a result of reporting that to 23 the quality assurance manager, did that reporting 24 of the failure to follow NJ NELAP procedures get 25 reported to NJ NELAP?</p>	<p style="text-align: right;">65</p> <p>1 A Bureau of Laboratories follows the 2 NJ NELAP requirements and procedures, and EPA 3 requirements. It's not that the Bureau of Labs 4 does not follow it. So your line of question 5 is that we do not follow it and we don't report 6 it to NELAP, that's what I don't understand 7 about – 8 Q That wasn't my question. 9 MS. KENDRA SMITH: Could you read 10 back my question, please. 11 (Question read.) 12 A Offhand, I don't – I do not 13 remember what exactly the requirement is, so I 14 cannot answer that question right now. 15 BY MS. KENDRA SMITH: 16 Q So you -- 17 A I don't remember what the 18 requirement for your line of questions, so I 19 cannot answer it right now. 20 Q So that I'm clear in your answer, you 21 don't know whether or not, if there is a deviation 22 from the procedures, if the NJ NELAP procedures 23 are not followed at the Bureau of Labs, whether or 24 not the Bureau of Labs, under the NJ NELAP 25 procedures, has to report that to NJ NELAP,</p>

<p>66</p> <p>1 correct? Did I understand you correctly?</p> <p>2 A At this time I do not recall – I</p> <p>3 do not know exactly what the requirement is, so</p> <p>4 I cannot answer your question whether we do it</p> <p>5 or we do not need to do it. I cannot answer</p> <p>6 that question right now.</p> <p>7 Q Maybe this will be a question you</p> <p>8 can't answer, but I will ask it anyway. Do you</p> <p>9 know how it is that a private citizen could report</p> <p>10 a violation of NJ NELAP procedures by the Bureau</p> <p>11 of Labs to NJ NELAP? Do you know what that</p> <p>12 procedure is to do that?</p> <p>13 A I do not know.</p> <p>14 Q Do you know, in terms of the Bureau</p> <p>15 of Labs, when there is an error made and found</p> <p>16 during analysis of the sample, what does NJ NELAP</p> <p>17 require the Bureau of Labs to do?</p> <p>18 A Generally, NJ NELAP requires us to</p> <p>19 come up with a corrective action, and they</p> <p>20 require us to implement those corrective</p> <p>21 actions and make sure that we follow those</p> <p>22 corrective actions when there's – if there is</p> <p>23 an error.</p> <p>24 Q I'm interested in what your</p> <p>25 understanding is of what type of violation would</p>	<p>68</p> <p>1 they find a repeat violations, I believe they</p> <p>2 can decertify us for that particular analysis.</p> <p>3 Q So repeat violations would be one</p> <p>4 thing that the Bureau of Labs could lose that</p> <p>5 accreditation with NJ NELAP, correct?</p> <p>6 A Correct.</p> <p>7 Q Could the Bureau of Labs also lose</p> <p>8 their lab accreditation with NJ NELAP for failing</p> <p>9 to report accurate results, test results,</p> <p>10 analysis?</p> <p>11 A Again, if there's an error, and</p> <p>12 it's a repeating error, repeating violation,</p> <p>13 Bureau of Labs can lose accreditation.</p> <p>14 Q I understand that. And aside from</p> <p>15 that being one of the ways that the Bureau of Labs</p> <p>16 could lose its lab accreditation with NJ NELAP,</p> <p>17 what I'm asking you is, is if the Bureau of Labs</p> <p>18 does not accurately report the analysis that they</p> <p>19 do on a given sample, would that be an instance in</p> <p>20 which the Bureau of Labs could lose their</p> <p>21 accreditation with NJ NELAP?</p> <p>22 MR. WATLING: Objection as to form,</p> <p>23 vague and ambiguous. Error used in one context,</p> <p>24 accurate, inaccurate, is used in another. If the</p> <p>25 witness understands how those are distinguished,</p>
<p>67</p> <p>1 risk the Bureau of Labs' accreditation with NJ</p> <p>2 NELAP.</p> <p>3 MR. WATLING: Is that a question?</p> <p>4 MS. KENDRA SMITH: That's a question.</p> <p>5 MR. WATLING: Could you repeat that,</p> <p>6 please.</p> <p>7 (Question read.)</p> <p>8 MR. WATLING: That doesn't appear to</p> <p>9 be a question. It's a statement of interest. Can</p> <p>10 you rephrase the question?</p> <p>11 MS. KENDRA SMITH: It has a what in</p> <p>12 it. It's a question.</p> <p>13 BY MS. KENDRA SMITH:</p> <p>14 Q You can go ahead and answer.</p> <p>15 MR. WATLING: Objection as to form.</p> <p>16 BY MS. KENDRA SMITH:</p> <p>17 Q Go ahead.</p> <p>18 A We need to follow reference method</p> <p>19 requirements, and we need to follow NELAP</p> <p>20 requirements.</p> <p>21 And if there is an error found and</p> <p>22 we do the corrective actions, and we implement</p> <p>23 corrective actions, and if they continue with</p> <p>24 the mistake again and again and again, I don't</p> <p>25 know how many times, I'm just saying that, if</p>	<p>69</p> <p>1 you may answer.</p> <p>2 A I don't understand that. That's</p> <p>3 what I'm . . .</p> <p>4 BY MS. KENDRA SMITH:</p> <p>5 Q Do you have any understanding at all</p> <p>6 on what grounds NJ NELAP can revoke the Bureau of</p> <p>7 Labs' lab accreditation with them?</p> <p>8 A As I explained before, if the</p> <p>9 Bureau of Laboratories fails to follow the</p> <p>10 reference method for which they are certified,</p> <p>11 and also if they don't follow the NELAP</p> <p>12 requirements, and if – and if these errors are</p> <p>13 repeated and repeated, if they find repeated</p> <p>14 errors happening, they can revoke your license.</p> <p>15 Q Okay, I think I see where the</p> <p>16 miscommunication is, and maybe it's on my part.</p> <p>17 So what you're saying is, your</p> <p>18 understanding is NJ NELAP can revoke the Bureau of</p> <p>19 Labs' accreditation with them if they find</p> <p>20 multiple violations for the same thing, is that</p> <p>21 right?</p> <p>22 A That is correct.</p> <p>23 Q Whatever those things might be. Is</p> <p>24 that right?</p> <p>25 A That's right.</p>

<p>70</p> <p>1 Q How often does the Bureau of Labs 2 have to report to the NJ NELAP per its 3 accreditation? 4 A NJ NELAP comes -- they can come 5 any time they want to, I mean, but they come 6 every two years for on-site audit. 7 Q Other than a visit from NJ NELAP at 8 least every two years -- 9 A That's correct. Every two years, 10 they come for an on-site audit. 11 Q Other than that on-site audit at 12 least once every two years, are there any 13 reporting requirements that the Bureau of Labs 14 must submit to NJ NELAP on an annual basis, 15 quarterly basis, per their accreditation in order 16 to keep their accreditation? 17 A We are supposed to provide 18 proficiency test results. 19 Q How often? 20 A Two per year. That's a requirement. 21 Two successful, it has to be successful, two, two 22 per year. 23 Q Any other reporting requirements with 24 NJ NELAP other than the proficiency testing that 25 you are aware?</p>	<p>72</p> <p>1 reports done by other labs accredited under the 2 Lab Accreditation Act to review them for purposes 3 of compliance with that act? 4 A You mean review the data? 5 Q Yes, to see, for instance, have you 6 ever reviewed any analysis that has been done by 7 another Pennsylvania lab to make sure that it 8 complies with all of the criteria or procedure of 9 the Lab Accreditation Act? 10 A Not recently, but when I was a 11 Chemist 1 many years ago, I participated in on 12 site maybe once or twice. I don't remember. 13 It was many, many -- in 19 -- I can't remember. 14 It was Chemist 1, many years ago. But that's 15 all I did for on site on that lab. 16 Q And under the Lab Accreditation Act, 17 you would agree, would you not, that a lab who is 18 accredited in Pennsylvania under that act could 19 lose its accreditation if it submits false reports 20 or data analysis to the DEP? 21 A Are you asking me that's my 22 understanding? 23 Q Yes, is that your understanding? 24 A I believe it's -- they're supposed 25 to -- same thing, if they learn there's some</p>
<p>71</p> <p>1 A They review the performance test 2 results. 3 Q So they do that twice a year. 4 A Twice a year. We report those 5 test results twice a year. 6 Q Your understanding under the labs' 7 accreditation with NJ NELAP, there are no other 8 reporting requirements other than that? 9 A That's correct. 10 Q Has the Bureau of Labs ever been 11 cited by NJ NELAP for not following the submission 12 of successful proficiency tests twice a year? 13 A No. 14 Q As part of Bureau, the DEP Bureau of 15 Labs, in your position, have you ever had the 16 responsibility of enforcing the Lab Accreditation 17 Act for any other Pennsylvania labs that are 18 accredited under that act? 19 A No. 20 Q Do you know who at the DEP does that? 21 A The section chief is Aaron Alger, 22 A-L-G-E-R, that is the last name. 23 Q A-L-G-E-R. Have you, in your -- any 24 of the positions that you have held with the DEP, 25 ever been called upon to review any analysis or</p>	<p>73</p> <p>1 errors or something, they're supposed to do 2 corrective actions, implement them, make sure 3 that if there's an error, they correct them, 4 and it doesn't continue. 5 And the same thing, if they 6 correct the action, error, they're okay, but if 7 not, then they repeat violation again can lead 8 to losing certification, but. 9 Q Okay. So it's your understanding if 10 it's repeat violations of the procedure -- 11 A Yeah, if they're -- if they 12 continue with their errors and not implement 13 corrective actions, it could -- they could lose 14 their accreditation. 15 Q With regard to the training of the 16 lab technicians, Chemist 1 through 4 within the 17 Bureau of Labs, are all of those individuals 18 trained on what an MCL, maximum contamination 19 level, is? 20 A Are you talking about all 21 chemists, and all -- chemists and all 22 technicians, everybody? The people who report 23 the results are aware of maximum contamination 24 levels. 25 Q Who would those people be that</p>

<p>74</p> <p>1 actually report the results?</p> <p>2 A Chemists are usually review –</p> <p>3 reports the result – I mean, Chemist 1 and 2</p> <p>4 prepares the samples and analyze them and</p> <p>5 reviews the data. Okay? And they approve the</p> <p>6 data. So they approve the data, and it goes to</p> <p>7 the final report.</p> <p>8 Q So who would be reporting the final</p> <p>9 results, like on an actual piece of paper, who</p> <p>10 would be doing that?</p> <p>11 A The chemist approves the final</p> <p>12 results.</p> <p>13 Q So once they approve the final</p> <p>14 results, that can be printed and --</p> <p>15 A Yes.</p> <p>16 Q -- given to the client, is that</p> <p>17 correct?</p> <p>18 A That's correct.</p> <p>19 Q And so the Chemist 1 and 2 who do the</p> <p>20 analysis are trained on what an MCL is, correct?</p> <p>21 A Yes.</p> <p>22 Q Are they also trained on what an SMCL</p> <p>23 is, secondary maximum contamination level?</p> <p>24 A Yes.</p> <p>25 Q And who does that training, who tells</p>	<p>76</p> <p>1 information, they go to chemist and gets</p> <p>2 information. But usually section chief is the</p> <p>3 one, the point of contact.</p> <p>4 Q And so if Chemist 1 and 2 are the</p> <p>5 ones that are reporting and approving the samples,</p> <p>6 is it Chemist 1 and 2 that determine how the</p> <p>7 results are reported on the actual form?</p> <p>8 And let me give you an example. For</p> <p>9 instance, if there was a compound tested for, and</p> <p>10 detected, but it's in that gray area where it's an</p> <p>11 estimated amount, is it that Chemist 1 and 2 who</p> <p>12 decide to put the qualifier J on it?</p> <p>13 A That's correct.</p> <p>14 Q And so then once it goes out and it</p> <p>15 has that qualifier J on it, if the client calls</p> <p>16 back and says why does this have this on there, he</p> <p>17 goes to the section chief, the section chief</p> <p>18 answers that question, this is the reason why. He</p> <p>19 doesn't consult with Chemist 1 or 2.</p> <p>20 A Not necessarily. As I say, if</p> <p>21 section chief needs to know more about it, the</p> <p>22 section chief goes to the chemist and do the</p> <p>23 question and find out if he does, he or she</p> <p>24 doesn't know the answer, why J is there.</p> <p>25 If section chief knows the answer</p>
<p>75</p> <p>1 them about that and teaches them what it is and</p> <p>2 what it pertains to?</p> <p>3 A Usually the section chief makes</p> <p>4 them aware of it. And for any drinking water</p> <p>5 MCL, we report to DEP also. So section chief</p> <p>6 also becomes aware of the data.</p> <p>7 Because we -- that goes in our</p> <p>8 data, the EPA database. So section chief also</p> <p>9 comes to know all the data that we report for</p> <p>10 drinking water.</p> <p>11 Q Once it's sent out to the client,</p> <p>12 once it's approved and then sent out to the</p> <p>13 client, if the client had a question about one of</p> <p>14 the results, who would they contact?</p> <p>15 A They contact the section chief.</p> <p>16 Q The section chief. So they would</p> <p>17 never go back to Chemist 1 or 2 to talk to them,</p> <p>18 correct?</p> <p>19 A They usually call the section chief.</p> <p>20 Q Any circumstances where they wouldn't</p> <p>21 call the section chief?</p> <p>22 A Well, they can call chemist also,</p> <p>23 I'm not saying no. But normally they call</p> <p>24 section chief, and then section chief answers</p> <p>25 the questions. And if section chief need more</p>	<p>77</p> <p>1 from the qualifier, they answer it. But if</p> <p>2 they need more information, they do go to</p> <p>3 Chemist 1 and 2 to find more information.</p> <p>4 Q And who is the section chief that</p> <p>5 would -- that the client would call with regard to</p> <p>6 water analysis?</p> <p>7 A It depend on the analysis.</p> <p>8 Q So let's say that analysis was done</p> <p>9 for organics, who would that section chief be?</p> <p>10 A That's organic section chief.</p> <p>11 Q Who is that person?</p> <p>12 A June Black.</p> <p>13 Q June Black. If there was a water</p> <p>14 analysis done for metals, who would be the section</p> <p>15 chief that the client would call?</p> <p>16 A Carmen Gaston.</p> <p>17 Q If there was analysis done, water</p> <p>18 analysis done for inorganics, who would be the</p> <p>19 section chief that would be contacted?</p> <p>20 A You want to know all the section</p> <p>21 chief names?</p> <p>22 Q I want to know these specific ones</p> <p>23 I'm asking about.</p> <p>24 A Bill Mowery.</p> <p>25 Q And if there were a question with</p>



<p>78</p> <p>1 regard to water analysis done for microbiology, 2 who would be that section chief? 3 <b>A Tony Russo.</b> 4 <b>Q</b> Any water done for volatile organic 5 compounds or semi-volatile organic compounds, all 6 of that would fall under the organics, that 7 section chief, is that correct? 8 <b>A That is correct.</b> 9 <b>Q</b> If there was a water sample that was 10 done for methane, ethane, propane, ethene, who 11 would be the section chief that would answer the 12 questions from the client about that? 13 <b>A June Black.</b> 14 <b>Q</b> And if there was a water analysis 15 done with regard to glycol, ethylene glycol, 16 propylene glycol, who would be the section chief 17 that the client would contact to ask a question 18 about? 19 <b>A June Black.</b> 20 <b>Q</b> With regard to Chemist 1 and 2 who 21 are doing the actual reporting and approval, are 22 they aware of the reporting -- let me start with, 23 the method, detection limits, for the actual 24 methods that they're using in a particular sample? 25 <b>A Yes.</b></p>	<p>80</p> <p>1 of Labs on behalf of the DEP? 2 <b>A No.</b> 3 <b>Q</b> Are you aware of any study done by 4 the DEP wherein the Bureau of Labs tested for and 5 characterized flow back, produced water, and frac 6 water associated with hydraulic fracturing 7 activities in Washington County, Tioga County, 8 Bradford County, basically the northwest and the 9 southwest regions and some of the east, northeast 10 regions of Pennsylvania? 11 <b>A I do not recall any study that's</b> 12 <b>done. I don't recall that.</b> 13 <b>Q</b> When a Chemist 1 and 2 finalizes a 14 report and then approves it and it gets sent out 15 to the client, is there ever a situation where the 16 client would call back to Chemist 1 or 2 or the 17 section chief and ask them what does this mean, 18 all these numbers here, is this water contaminated 19 or not? 20 <b>A No. I mean, we -- our routine</b> 21 <b>procedure is to provide the analytical data to</b> 22 <b>our client. It's up to our client what</b> 23 <b>interpretation they want to do, use, using that</b> 24 <b>data. We cannot interpret data for them.</b> 25 <b>What our job description, per se,</b></p>
<p>79</p> <p>1 <b>Q</b> And are they also trained on and 2 familiar with the reporting levels of particular 3 compounds found in a water sample? 4 <b>A Can you repeat that question for</b> 5 <b>me? Sorry. Can you rephrase it, if possible.</b> 6 <b>Q</b> Sure. Are they also trained on and 7 do they have knowledge of what the reporting limit 8 for a particular compound would be that they're 9 analyzing the sample for? 10 <b>A Yes.</b> 11 <b>Q</b> And would the section chief also be 12 aware of all that information? 13 <b>A Yes.</b> 14 <b>Q</b> During the course of your career with 15 the DEP, had you ever been involved with any water 16 analysis and characterization done on flow back 17 water, produced water or frac water associated 18 with hydraulic fracturing done by the Bureau of 19 Labs for the DEP? 20 <b>A When I was analyzing samples? Can</b> 21 <b>you repeat that question for me, please?</b> 22 <b>Q</b> Sure. During the course of your 23 career with the DEP, in 2008 and 2009, were you 24 ever involved with any water analysis of flow 25 back, produced water or frac water for the Bureau</p>	<p>81</p> <p>1 <b>is to follow the reference method, analyze the</b> 2 <b>results -- analyze the sample, create a report</b> 3 <b>and provide it to our client. And it's then up</b> 4 <b>to them what they want -- whatever they want to</b> 5 <b>do with the data. We cannot make</b> 6 <b>interpretations for them.</b> 7 <b>Q</b> When you say we cannot make 8 interpretations for them, is that a matter of job 9 descriptions that you're not allowed to, or that 10 you're not trained to? 11 <b>A Our job description is to analyze</b> 12 <b>the samples and produce the data. And that's</b> 13 <b>what we do.</b> 14 <b>Q</b> Since you don't interpret data, 15 that's a direct result of your job description, 16 correct? 17 <b>A That's part, yes. It's not part</b> 18 <b>of our job description to interpret the data to</b> 19 <b>our client.</b> 20 <b>Q</b> So now understanding that that's not 21 part of your job description, could Chemist 1 and 22 2 section chief, yourself, actually interpret 23 water tests to determine whether or not the 24 water's contaminated? 25 <b>A We do not interpret data to our</b></p>

82

1 client because we just provide the analytical  
2 data to them.  
3 Q Right. And I understand you do that  
4 and that's your job description, but what I'm  
5 asking you is, based on your experience and  
6 training, when a water sample comes in and it's  
7 analyzed, if you were asked to interpret it, is  
8 this water contaminated or not, could you, could  
9 the section chief, could Chemist 1 and 2 do that?  
10 A Not to my knowledge.  
11 Q And why not?  
12 A Because that's not normally, we  
13 don't do that. We don't --  
14 Q Right.  
15 A I cannot say that. But that -- to  
16 my knowledge we do not interpret the data to  
17 our client.  
18 Q But the section chief, Chemist 1 and  
19 2, yourself, you're trained on what an MCL is, and  
20 SMCL, and if those things are violated or things  
21 are above that, you do report that on a report,  
22 correct?  
23 A We do report them. And if  
24 something, like, if the EPA drinking water  
25 criteria for MCL and somebody calls us that

83

1 this result is higher than -- is high, then is  
2 it high or low, if it is a drinking water  
3 sample and if it falls in that category, EPA  
4 drinking water rules, then we use those EPA  
5 drinking water rules, whatever's written, and  
6 then we, based on the EPA drinking water rules,  
7 we can say yes, this is -- exceeded the MCL,  
8 did not exceed the MCL. And we provide that  
9 information based on the EPA rules.  
10 So that's not interpretation.  
11 This is just answering their question that this  
12 is the rule, this is what your data is, and  
13 this is what it is.  
14 Q I think I understand. Let me ask  
15 this follow-up question then. With regard to the  
16 NJ NELAP accreditation that the Bureau of Labs  
17 holds, if an MCL violation was found in a sample  
18 that your lab did and it was not reported, would  
19 that be a violation of the NJ NELAP procedures?  
20 A It's a violation to DEP. DEP  
21 requires to report the MCL. And we have a  
22 procedure, if it's a true drinking water  
23 sample, we have to report it to the client, to  
24 the client and the -- what is called -- public  
25 water supply, we need to report to them.

84

1 And there's a procedure that we  
2 need to follow, if it is a drinking water  
3 sample, if it is a public drinking water  
4 sample.  
5 Q And so under the rules that the  
6 Bureau of Labs works under, if it was an MCL  
7 violation of a private water sample, are you  
8 required by NJ Nelap or the DEP, either or, to  
9 report that?  
10 A No.  
11 Q Why not?  
12 A Pennsylvania does not require  
13 to -- the private well water sample does not  
14 fall into -- what do you call -- I don't  
15 remember what the -- we are required to report  
16 only public water supply samples.  
17 Q And do you know where that  
18 requirement comes out of, that it only has to be  
19 reported if it's public water?  
20 A That is a Pennsylvania law. I  
21 don't remember specific law.  
22 Q And so even if you know, when you get  
23 the sample, that it is a private person's water  
24 that's being tested, that there's an MCL violation  
25 for --

85

1 A For the record, we -- when we  
2 receive the sample, our analysts, they do not  
3 know this is a private well sample or if it --  
4 they will know only if it is a public water  
5 supply sample because that's the only  
6 information we marked when we received the  
7 sample, if it is a public water supply sample,  
8 which is official drinking water sample.  
9 If it is from the private citizen  
10 or private well, there is no way for my staff  
11 to know this is a private well sample. So they  
12 need to analyze certainly, or they need to  
13 report something. So that's...  
14 Q Okay. So would it be your  
15 understanding with regard to both the DEP and NJ  
16 NELAP that a maximum -- or MCL violation found in  
17 a private water source that is not reported would  
18 not be a violation of DEP regulations or NJ NELAP?  
19 A That's correct.  
20 MR. WATLING: Objection as to the  
21 form of the question.  
22 BY MS. KENDRA SMITH:  
23 Q And if there was a sample that was  
24 done by your lab and an MCL violation was found,  
25 but it was a private drinking water source, would

86

1 it be appropriate for your lab not to report the  
2 MCL violation on the actual report that comes out  
3 of the lab to your client?  
4 MR. WATLING: Objection as to form of  
5 the question in that it assumes that an MCL  
6 violation occurs with a private drinking supply.  
7 MS. KENDRA SMITH: I think that's  
8 inferred in the question.  
9 BY MS. KENDRA SMITH:  
10 Q Go ahead.  
11 MR. WATLING: That's the question.  
12 A Can you please repeat the  
13 question.  
14 (Question read.)  
15 A That sample that we received was  
16 not marked as a drinking water sample. So  
17 because it is not from public water supply. So  
18 when we report the -- when our chemist reports  
19 the results, they just report the data, what  
20 they got the number from.  
21 So there is no requirement on the  
22 sample form they're supposed to report any kind  
23 of -- more than what the data they got. If  
24 it's -- because it is not marked as official  
25 drinking water sample.

87

1 BY MS. KENDRA SMITH:  
2 Q And so would it be inappropriate for  
3 an individual from the DEP or the DEP Bureau of  
4 Labs to report that there was not an MCL violation  
5 on a water sample when there was?  
6 MR. WATLING: Objection as to form.  
7 Vague and ambiguous, contains double negatives and  
8 is compound. If you understand it.  
9 A Yeah, I don't understand the  
10 question. Can you please change the way you  
11 ask the question.  
12 BY MS. KENDRA SMITH:  
13 Q Sure. Would it be inappropriate for  
14 someone from the DEP to report to a government  
15 body, some other government body, to a person, to  
16 a public water source, that there was no MCL  
17 violation on a water sample analyzed when, in  
18 fact, there was?  
19 MR. WATLING: Repeat the objection.  
20 MR. JOHN SMITH: You can cue the  
21 witness all day, Rick, if you want.  
22 MR. WATLING: I don't understand what  
23 you're saying, John.  
24 MR. JOHN SMITH: You are nodding your  
25 head over there in disagreement with the question,

88

1 then you raise an objection to let her know not to  
2 answer. It's been going on all morning.  
3 MR. WATLING: That's not accurate,  
4 John.  
5 MR. JOHN SMITH: That's my  
6 interpretation.  
7 MS. KENDRA SMITH: Just let the  
8 record reflect that.  
9 BY MS. KENDRA SMITH:  
10 Q If you can answer the question, that  
11 would be great.  
12 MR. WATLING: Let the record reflect  
13 that I'm trying to follow this line of  
14 questioning. I occasionally move my own lips with  
15 which to help me understand compound questions  
16 without making too many objections.  
17 MR. JOHN SMITH: I saw your head  
18 shaking back and forth. That's all.  
19 MR. WATLING: Well, we're supposed to  
20 take a break 15 minutes ago, if I'm on low blood  
21 sugar, please forgive me.  
22 This isn't necessary to be on the  
23 record, John. If you want to talk about this  
24 afterwards, we can.  
25 MR. JOHN SMITH: That's fine.

89

1 BY MS. KENDRA SMITH:  
2 Q Could you answer the question,  
3 please?  
4 A Can you please repeat one more  
5 time, please.  
6 Q Sure.  
7 MS. KENDRA SMITH: If you could read  
8 it back, that would be great.  
9 (Question read.)  
10 A So asking me for my opinion?  
11 BY MS. KENDRA SMITH:  
12 Q Yeah, I'm just asking whether or not  
13 that would be appropriate. Your opinion.  
14 A If it is a public water supply  
15 sample, and if there is MCL violation, we are  
16 required to report it to whatever appropriate  
17 agency or whoever appropriate people are,  
18 supposed to report it.  
19 If it is a public water supply,  
20 it's part of the regulations. It's a violation  
21 of -- MCL violation, they're supposed to report  
22 it, that there's MCL violation. That's what my  
23 understanding is. If it is a public water  
24 supply. Because that's the rule. I can't -- I  
25 don't know any other sample.

90

1 Q With your Chemist 1 and 2, yourself,  
2 the section chiefs, are they trained in why an MCL  
3 and a compound that goes beyond it is important to  
4 report in a public water source?

5 A What my -- my staff knows that  
6 these are the set of primary contaminants  
7 required by EPA and these are the limits, MCL  
8 limits.

9 And any samples that they analyze,  
10 if they exceed that number, they're supposed to  
11 report it, and that's all they know. I don't  
12 know anything more than what their understanding is.

13 But they know what the rules are,  
14 what they're supposed to do when they get an  
15 analytical data and that they report. And they  
16 follow those rules and regulations.

17 MR. JOHN SMITH: Do you want to  
18 break now?

19 MR. WATLING: We need to take a  
20 break.

21 MS. KENDRA SMITH: Okay.  
22 (Luncheon recess.)

23 MS. KENDRA SMITH: Back on the  
24 record.

25 Just before we begin, I forgot to

91

1 do this in the beginning of the deposition, so  
2 I will do it now.

3 Prior to the deposition, about 10  
4 minutes before the deposition, I was handed a  
5 stack of documents responsive -- or from the  
6 DEP responsive to Appellant's first  
7 supplemental requests for production of  
8 documents.

9 The documents in the stack that's  
10 about, I will guess, six inches high, appear to  
11 be germane to the deposition that we're taking  
12 right now.

13 However, despite my efforts during  
14 lunch as well as prior to the deposition to get  
15 through this information in order to ask this  
16 witness about it, I have not been able to do  
17 that.

18 And as a result of getting this  
19 information right at this deposition, I would  
20 reserve my right to re-depose this witness with  
21 regard to specifically this information that  
22 was given to me today ten minutes before the  
23 deposition.

24 MR. WATLING: The Department  
25 states, for the record, that counsel for

92

1 Appellant was notified that these documents in  
2 particular, this notification came in the month  
3 of August this year, these documents in  
4 particular would be provided later this week.

5 And it was Appellant's counsel  
6 that decided to keep this particular deposition  
7 on schedule for today with that knowledge.

8 Nevertheless, though the  
9 Department could have produced these documents  
10 pursuant to its notification later this week,  
11 it chose to produce them today because this is  
12 when it was able to do so and in good faith did  
13 produce them.

14 MS. KENDRA SMITH: Just for the  
15 record, the response of the Department in its  
16 answer indicated that the QA/QC documents  
17 associated with these samples will be produced  
18 or available for production when they are --  
19 let me start over -- will produce the QA/QC  
20 documents associated with those samples when  
21 they are available for production from the  
22 Department's Bureau of Labs as described in the  
23 counsel for the Department's August 31st, 2012  
24 letter.

25 So making the statement that I was

93

1 aware that you would produce it at the end of  
2 this week prior to this deposition may have  
3 well come in an e-mail form, but without  
4 reference to the particulars of what was being  
5 produced at this time.

6 And given the scheduling of the  
7 deposition, had it been a month earlier, all  
8 the depositions in this case that were  
9 scheduled for September were moved to October,  
10 and as a result of that, this first deposition  
11 was maintained where it was.

12 So we will leave that up to the  
13 Judge to decide if, in fact, it comes to that,  
14 that I need to re-depose her.

15 BY MS. KENDRA SMITH:

16 Q Starting out, in my last line of  
17 questioning to you, we were talking about the  
18 MCL's and reporting those, do you recall that?

19 A Okay.

20 Q Okay? And so when a lab -- your lab  
21 does an analysis and an MCL violation is found,  
22 pursuant to the procedures within your lab, that  
23 MCL violation is noted on the written report  
24 that's sent to your client, correct?

25 MR. WATLING: Objection as to form.

<p>94</p> <p>1 Assumes facts not established. 2 BY MS. KENDRA SMITH: 3 Q You can go ahead and answer. 4 A If it is a public water supply 5 sample, and if there is an MCL violation, the 6 procedure is to -- I don't believe it goes on a 7 return report that this is an MCL violation. 8 The procedure is to inform the 9 DEP, and there is a DEP database in which we 10 have to report all drinking water, public water 11 drinking water sample results. 12 So we have to inform, if it is a 13 violation, we have to inform the public water 14 supply, we have to inform the DEP sanitarian 15 that there is an MCL violation and follow that 16 procedure. 17 Q So, for example, if you have an MCL 18 violation for nitrates, if it wasn't a public 19 water source, but rather a private water source, 20 you would just report the number that that nitrate 21 came in at, regardless of whether you make a 22 notation of MCL or not? 23 A If it is a water sample, and if 24 water with nitrate is -- report comes out, we 25 report it, if it is water sample. If it is a</p>	<p>96</p> <p>1 NELAP accreditation procedures in reporting 2 results that your lab finds as a result of a water 3 analysis, do you agree under the NELAP procedures 4 that the results that your lab reports must be 5 accurately, clearly, unambiguously and objectively 6 reported? 7 A Bureau of Lab reports, analytical 8 reports, and do follow the NELAP requirements 9 or follow reporting the results. Whatever the 10 NELAP requirement is, that's what we follow 11 when we report results. 12 Q In 2008 and 2009, while you were 13 working for the Bureau of Labs, the DEP, are you 14 aware of any testing done by your lab for the DEP 15 regarding frac water, flow back water or produced 16 water? 17 A We get the samples all the time, 18 water samples, all kind of samples. When we 19 get samples, we just log the collector number, 20 ID number. 21 We do not log whether it is a frac 22 water or wastewater. We only document if it is 23 a drinking water; otherwise, it's water sample, 24 it's a water sample for us, and we just analyze 25 it and we report it.</p>
<p>95</p> <p>1 public water supply sample and it is marked 2 S -- SDWA sample, then we follow the 3 regulations of reporting MCL violation. 4 Q And do you do the same thing with 5 secondary maximum contaminant level violations? 6 A I don't believe that's required. 7 Q And so if there is a secondary 8 maximum concentration level violation on a water 9 analysis that you do, your lab does, do you report 10 that secondary maximum contaminant level to the 11 client? 12 A We just report the data that we 13 get from the analysis. 14 Q So you just report the number? 15 A We just report the number. 16 Q Would you agree with me that pursuant 17 to the NELAP regulations with regard to 18 accreditation in reporting results for the Bureau 19 of Labs, that the results for a test must be 20 accurately, clearly, unambiguously and objectively 21 reported? Would you agree with that? 22 A The data must be reported very 23 clearly on a report, with the reporting unit 24 and the numbers. 25 Q So my question was, pursuant to the</p>	<p>97</p> <p>1 Q So would it be correct in stating 2 then that your lab could have analyzed, in 2008, 3 2009, samples taken by the DEP of frac water, flow 4 back and produced water, but you wouldn't know? 5 A That's true, no. 6 Q I'm going to hand you what's being 7 marked as Exhibit 1 to this deposition. 8 (PA-DEP Recommended Basic Oil &amp; Gas 9 Pre-Drill Parameters marked as Exhibit Number 1.) 10 BY MS. KENDRA SMITH: 11 Q Do you recognize this document? 12 A Yes. 13 Q Did you help create it? 14 A No. 15 Q How do you recognize it? 16 A I heard about it, that there's a 17 list of parameters that lab can analyze if -- 18 any lab, not my lab. I'm just saying that 19 that's parameters that they come up with. 20 Q Who did you hear that from? 21 A I don't remember. 22 Q Has the -- let me ask this. Can the 23 Bureau of Labs for the DEP accept water samples 24 from private citizens to test? 25 A No, not -- not routinely. We do</p>

98

100

1 analyze private citizen samples for microbiology  
2 analysis, but most of, majority of our samples,  
3 they are only from either DEP staff or State  
4 agent – other State agencies, few of them.  
5 Q Have any of your staff at the Bureau  
6 of Labs been trained on what the DEP recommended  
7 basic oil and gas pre-drill parameters are?  
8 A No.  
9 Q If a private citizen came into the  
10 DEP and said I'd like you to test my water for the  
11 Pennsylvania DEP recommended basic oil and gas  
12 pre-drill parameters, they wouldn't have any idea  
13 what to test that water for, is that right?  
14 A No. No.  
15 Q That's not right, or that's right?  
16 A They do not – they will not know  
17 that they – okay, let me correct it.  
18 First of all, your question, can  
19 you ask question – re – can you rephrase your  
20 question or repeat your question, then I can  
21 answer.  
22 Q Sure. So my understanding is that no  
23 one in the Bureau of Labs has been trained on what  
24 the PA DEP recommended basic oil and gas pre-drill  
25 parameters are to test for at your lab?

1 there are 22 different parameters that the DEP is  
2 suggesting that homeowners test prior to any  
3 drilling taking place in their area. Do you know  
4 why it is these specific parameters were chosen to  
5 be tested for before drilling occurs?  
6 A I don't know.  
7 Q Do you know who would?  
8 A No.  
9 Q No one at the DEP ever consulted with  
10 you prior to creating this Exhibit 1 for your  
11 input on what should be included as a oil and gas  
12 pre-drill parameter?  
13 A No.  
14 Q Have you ever received a water sample  
15 from an employee of the DEP who was testing a  
16 private homeowner's water and a request was made  
17 for your lab to test the water for pre-drill  
18 parameters?  
19 A We receive the sample from DEP  
20 employee, water samples, any samples. And when  
21 they submit the samples, they request whatever  
22 test they want us to test for, like they can  
23 ask for anything, like organic analysis,  
24 inorganic analysis.  
25 Most of the time they just say

99

101

1 A I don't know. We do not provide  
2 training for that.  
3 Q And so if a private citizen came to  
4 the DEP Bureau of Labs and said I would like you  
5 to test my water for the PA DEP recommended basic  
6 oil and gas pre-drill parameters, your lab  
7 wouldn't know what they were talking about?  
8 A The very first thing is that we do  
9 not accept samples from private citizens for  
10 water analysis.  
11 We, as I stated before, we accept  
12 samples from DEP staff or other State agencies  
13 like DCNR. And so that's the first thing. So  
14 there is no question about accepting samples  
15 from private citizens, if that answers your  
16 question.  
17 Q Okay. And so with this PA DEP  
18 recommended basic oil and gas parameters, do you  
19 know who was involved in determining what  
20 parameters should be tested for?  
21 A I'm not – I don't know.  
22 Q Do you know who would know at the  
23 DEP?  
24 A I don't know.  
25 Q It indicates in this Exhibit 1, that

1 they submit the sample for standard analysis  
2 for which there are standard, fixed analytes  
3 already there. So they say I want to do  
4 standard analysis called 942. That's an example.  
5 So we just get the water sample.  
6 All we need to know, either specific test name,  
7 or the code in which there are a list of tests,  
8 and that's all we need to know, nothing else.  
9 Because that's what we need in order to log the  
10 sample in the system. So.  
11 Q Since you have been working at the  
12 Bureau of Labs for the DEP, do you recall ever  
13 developing a method to test specifically for the  
14 pre-drill parameters contained in Exhibit 1?  
15 A No.  
16 Q Do you know, since you have been at  
17 the DEP Bureau of Labs, has a method been  
18 developed to test for pre-drill parameters listed  
19 in Exhibit 1?  
20 A Can you repeat that question,  
21 please, for me.  
22 (Question read.)  
23 A No.  
24 BY MS. KENDRA SMITH:  
25 Q So if a DEP employee was submitting a

26 (Pages 98 to 101)

<p style="text-align: right;">102</p> <p>1 water sample to you and wrote on the sample 2 submission sheet that he wanted the pre-drill 3 parameters tested for, your lab would not know 4 what that included, correct? 5 <b>A That is correct. We need specific 6 standard analysis code or the test code that 7 they would like us to analyze for.</b> 8 Q It also indicates in here that these 9 are the ones, the parameters, that they are 10 recommended that a homeowner prior to drilling 11 test their water for, and then there is an 12 asterisk at the bottom of that little chart, and 13 it says, as a minimum, they should have their 14 water, private well tested for the starred 15 parameters. Do you see that? 16 <b>A Um-hmm.</b> 17 Q Do you know why that is? 18 <b>A I don't know.</b> 19 Q Also in here it indicates that, in 20 addition to these parameters, that a homeowner may 21 wish to have their water tested for a more 22 extensive list of parameters. 23 Do you know what that more extensive 24 list of parameters is that's referred to in 25 Exhibit 1? Top of the page. It's the third</p>	<p style="text-align: right;">104</p> <p>1 BY MS. KENDRA SMITH: 2 Q Have you ever attended any seminars 3 within the DEP where the most frequent compounds 4 of oil and gas -- or I'm sorry, most frequent 5 compounds of flow back, produced water or frac 6 water, have been discussed? 7 <b>A No.</b> 8 Q Have you ever been to any seminars or 9 meetings, either internally or DEP-wide, that have 10 discussed what the DEP has found to be the most 11 common compounds found in frac water? 12 <b>A No.</b> 13 Q How about the most common compounds 14 found in flow back water? 15 <b>A No.</b> 16 Q How about the most common compounds 17 found in produced water? 18 <b>A I don't remember. I don't think I 19 have discussed anything like that with anybody, 20 I mean, in DEP, like, meetings or anything.</b> 21 Q When a DEP personnel is sent out to a 22 site to collect water, does that person, that 23 sample collector, come from the Bureau of Labs? 24 <b>A No.</b> 25 Q Where does that person come from?</p>
<p style="text-align: right;">103</p> <p>1 sentence, additionally. 2 <b>A No, I don't know that.</b> 3 Q I'm sorry, right before there. The 4 following list is not exhaustive. Right up top 5 there. 6 <b>A Okay. I don't know that list 7 right now.</b> 8 Q Do you know, do you think you have 9 seen that list? 10 <b>A No.</b> 11 Q Do you know who might have 12 information about that list? 13 <b>A No, I don't know.</b> 14 Q In terms of your work at the DEP, 15 have you ever had any experience with or any 16 training in what compounds are most frequently 17 found in flow back water, produced water or frac 18 water? 19 <b>A No, I don't remember right now.</b> 20 <b>Can you repeat that question for me?</b> 21 <b>Q Sure.</b> 22 <b>MS. KENDRA SMITH: Can you repeat</b> 23 <b>that.</b> 24 <b>(Question read.)</b> 25 <b>A No.</b></p>	<p style="text-align: right;">105</p> <p>1 <b>A From the regional office or the --</b> 2 <b>that's a field staff, DEP field staff. They go</b> 3 <b>out and collect the samples.</b> 4 Q Does your laboratory have any 5 training that it does for the DEP field staff to 6 demonstrate how water collection should be done? 7 <b>A No.</b> 8 Q Do you know whether or not the DEP 9 field staff goes through any training on how to 10 collect water samples? 11 <b>A I do not know that.</b> 12 Q Are you aware that depending upon 13 what the water is being sampled for dictates how 14 it should be collected? 15 <b>A On our Bureau of Laboratories</b> 16 <b>website, we post our requirements when field</b> 17 <b>staff submit the samples, what type of models</b> 18 <b>they're supposed to use, what type of</b> 19 <b>preservatives they're supposed to use, what is</b> 20 <b>the holding time of the particular analysis.</b> 21 <b>That information is on our</b> 22 <b>website. And also they can call if they need</b> 23 <b>that information. So that meets our acceptance</b> 24 <b>criteria for the sample. The sample must be</b> 25 <b>preserved with certain preservatives, or sample</b></p>

106

1 must be iced in ice. That's our method  
2 requirement. And we do communicate that with  
3 our field staff so that when we get the sample,  
4 they are properly preserved, properly collected  
5 in our accepted sample bottles. So that we  
6 provide that information.

7 We do not provide training to  
8 actually how physically they go in the field  
9 and collect the sample.

10 Q And, in fact, you have a manual from  
11 the Bureau of Labs telling field personnel or  
12 staff how water samples should be properly  
13 collected and preserved, correct?

14 A We have a manual to provide the  
15 field staff what type of bottle is to be used,  
16 what type of preservative is to be used and the  
17 holding time and all that. That's, as I said.

18 Q And so outside of that manual, the  
19 Bureau of Labs doesn't provide any additional  
20 training to those field staff for how to collect  
21 water, correct?

22 A That is correct.

23 Q Do you know if field staff is trained  
24 beyond what's in your manual or posted on the  
25 website, the Bureau of Labs' website, who would do

107

1 that training at the DEP?

2 A I don't know.

3 Q And you indicated that in the  
4 sampling process, that the manual refers to  
5 particular bottles or containers to be used to  
6 collect water samples, correct?

7 A Correct.

8 Q Why are there different bottles and  
9 samples (sic) to be used to collect different  
10 types of water samples?

11 A Basically for different type of  
12 analysis, most of the sample bottles and  
13 preservatives requirement comes from the  
14 reference method, the EPA requirements, that  
15 for certain analysis you must use certain type  
16 of bottles.

17 And so that that becomes our  
18 requirement as well. Depending on the type of  
19 analysis, we follow the method requirements.

20 Q If you received a water sample that  
21 was collected in a bottle that was inappropriate  
22 for the type of analysis requested, what would  
23 happen to that sample?

24 A When we receive a sample in a  
25 bottle that doesn't meet our acceptance

108

1 criteria, we contact our client. We inform  
2 them that you have two choices. This does not  
3 meet our acceptance criteria, so we can cancel  
4 the sample, and you can re-collect it in a  
5 proper container; if not, then you need to  
6 provide a waiver to analyze the sample. And  
7 the report will indicate the sample was not  
8 collected in a proper container.

9 So that will be documented, that  
10 the data will be qualified indicating that  
11 these results are information purpose, doesn't  
12 meet the requirement.

13 And we -- when that's happened  
14 after we receive in writing from our client  
15 that they want us to report the results, so we  
16 -- and we document that with our sample  
17 submission form.

18 Q And so when you say that you inform  
19 that the requirements haven't been met, you are  
20 referring to the NJ NELAP requirements for a  
21 particular method followed?

22 A That is actually an EPA reference  
23 method requirement for the bottle. Those  
24 detailed requirements of the EPA requirement.  
25 The NJ NELAP requirement is not that detail.

109

1 Q Right, I understand.

2 A We are supposed to follow the  
3 method requirement.

4 Q So I understand that the particular  
5 bottle that's supposed to be used will follow an  
6 EPA method requirement, and when that doesn't  
7 happen, under NJ NELAP, it says if you're going to  
8 use the EPA method, you need to use their bottles.  
9 So if that's not used, it doesn't comply with the  
10 NJ NELAP --

11 A Yeah.

12 Q -- requirements, correct?

13 A Yeah, it doesn't comply with  
14 certification requirement.

15 Q For instance, if you were collecting  
16 a water sample to test for VOCs per the EPA method  
17 524.2, what type of container or bottle would you  
18 use?

19 A We required to, if it's a drinking  
20 water sample -- if it's a water sample, we need  
21 two 40 mL, milliliter water, VOA amber  
22 preserved with nitric acid to pH less than two  
23 without any air bubbles.

24 MR. JOHN SMITH: Can we go off the  
25 record.



<p style="text-align: right;">110</p> <p>1 (Discussion held off the record.) 2 MR. JOHN SMITH: Go ahead, back 3 on. 4 BY MS. KENDRA SMITH: 5 Q If you were collecting a water sample 6 to test for semi-volatile compounds per the EPA 7 method 525.2, you would use a one liter glass 8 bottle, correct? 9 A That is correct. 10 Q Why the difference between the two? 11 A It's the volume of water required 12 for the analysis by the method. 13 Q If you're simply just testing a water 14 sample for metals, what would be the bottle or 15 container you would use? 16 A We need 125 mL plastic container 17 sample preserved with nitric acid to pH less 18 than two. 19 Q Do you know whether or not any of the 20 sample collectors are informed about or trained on 21 the hazards of using nitric acid? 22 A No, I don't know. 23 Q Do you know whether or not that's in 24 your manual on how to collect samples? 25 A No, that's not in our manual, how</p>	<p style="text-align: right;">112</p> <p>1 collecting samples to be analyzed, is there a 2 requirement pursuant to the method being used to 3 analyze the water whether or not water should be 4 purged first or not purged when taking the sample? 5 A I don't know. 6 Q Is there any way, when a sample 7 collector would collect water and the method would 8 require it to be purged first, that you -- the lab 9 would know whether or not that happened? 10 A I don't know answer. I don't know 11 answer to that question. 12 Q Do you know whether or not, when 13 collecting, methane, ethane, propane, ethene, 14 water for sampling for those constituents, whether 15 or not the water should be purged or not? 16 A I don't know. I don't know 17 specifically that method. 18 Q Do you know whether or not there's 19 anywhere on the sample submission sheet that the 20 sampler could note that the water had been purged 21 for three minutes or that it wasn't purged at all? 22 A Can you repeat that question? 23 Q Sure. Is there anywhere on a sample 24 submission sheet where the sample collector could 25 note to the lab that this sample I'm submitting to</p>
<p style="text-align: right;">111</p> <p>1 to collect samples. 2 Q Is the warning about using nitric 3 acid in your manual? 4 A For the collector? 5 Q Yes. 6 A No. 7 Q If you were testing water for general 8 water chemistry parameters, like chloride or pH, 9 what type of containers would you use? 10 A We require 500 mL plastic bottles 11 without any preservatives. 12 Q And why without preservatives for 13 that particular type? 14 A That's the method requirement. 15 Q And in sampling drinking water for 16 methane, ethane, propane, ethene, what type of 17 container is required? 18 A I don't remember right now 19 specifically. 20 Q With regard to methane, ethane, 21 propane and ethene, is the Bureau of Labs 22 accredited to test specifically for those in 23 water? 24 A Yes. 25 Q Can you tell me, once -- in</p>	<p style="text-align: right;">113</p> <p>1 you had been taken directly with no purging at 2 all? 3 A On the sample submission form, 4 there is a place where it says additional 5 information. Collector can write anything they 6 want to. But there's no specific area where 7 you -- whatever you are saying. 8 Q And there's no requirement by your 9 lab to indicate whether water was purged or not 10 before it was collected? 11 A Not that I know of. 12 Q Would you agree that a water sample 13 analysis is only as good as the collection 14 techniques used to obtain it? 15 A I don't. . . For water analysis, 16 each step must be done correctly in order to 17 get a correct -- that's what I believe. 18 Q Given that your lab personnel at the 19 Bureau of Labs isn't out in the field, does your 20 lab presume that the sample collector has 21 collected it appropriately in terms of whether 22 it's purged or not purged? 23 A We follow our procedures. We do 24 not assume anything. So we accept samples when 25 it require -- it meet our requirements of</p>

<p style="text-align: right;">114</p> <p>1 sample preservation, collection, containers and 2 everything, we just accept it. 3 I do not assume anything what they 4 do in the field. And we follow our method of 5 our requirements, our rules and regulations for 6 analytical use. So that's what we do. 7 Q Do you know whether the manual from 8 the Bureau of Labs has in there what samples 9 should be purged for before analysis and what 10 samples shouldn't be purged for? 11 A I don't believe. And I don't know. 12 Q Can you tell me when the head space 13 of a sample collected is important? 14 A I don't know the answer to that 15 question right now. 16 Q Do you know what the head space is in 17 a collection sample? What that's referring to? 18 A When we collect, when we get a VOA 19 sample, that must be collected without any head 20 space because we are analyzing for volatile 21 organics, so we do not want any head space, 22 so -- because it's volatile samples. We are 23 looking for volatile organic, so there -- 24 Q Volatile. 25 A Volatile. So there should not be</p>	<p style="text-align: right;">116</p> <p>1 right now. Either -- depending on either they 2 cancel the sample, or they report the data with 3 the qualifier. Those are the routine 4 procedures that any criteria, any sample that 5 doesn't meet our acceptance criteria, we make 6 sure we inform our client and make them aware 7 of the problem. 8 And they have to make the decision 9 whether they want to cancel the sample and 10 re-collect them, or they want the data with the 11 qualifier in it. 12 Q With the scenario where a sample, if 13 a sample was sent to you to be tested for VOC, and 14 it doesn't have the proper head space or has head 15 space -- 16 A It has. 17 Q -- in it, is that one of those things 18 that would get noted somewhere? 19 A Yes. 20 Q Where would that be noted and -- 21 A In the final report, it will -- 22 the data will be qualified in the final report. 23 Q If the client chose to have it run 24 anyway, even though -- 25 A Correct.</p>
<p style="text-align: right;">115</p> <p>1 any head space. 2 Q And why is that? 3 A Because if there's a head space, 4 because of the nature of the analyte, we -- it 5 gets diffused and we lose the compound. 6 Q So if a sample came into your lab 7 that was requesting that it be analyzed for 8 volatile organic compound and there was a head 9 space in it, would that be one of the things that 10 would be an error in the collection of the sample 11 that the supervisor would be called? 12 A When we receive samples for 13 volatile organic analysis, we check for head 14 space, air bubbles we call them. And there is 15 a specific criterion SOP that analysts follow, 16 and they take proper actions based on the, 17 whatever reference method is, what they need to 18 do when they receive a sample with the head 19 space for volatile organic analysis. 20 Q What does that SOP require them to do 21 if the head space isn't correct on a VOC sample 22 they received or a sample that's supposed to be 23 tested for VOC? 24 A They just follow the procedure 25 what's stated in SOP, which I don't remember</p>	<p style="text-align: right;">117</p> <p>1 Q -- it didn't conform to the proper 2 procedures for that method -- 3 A That is correct. 4 Q -- if the lab still ran it per the 5 client's request, would that be a violation of the 6 NJ NELAP requirements? 7 A No, as far as we qualify the data, 8 that's not a violation. 9 Q So as long as it's qualified, it 10 complies with the NJ NELAP requirements. 11 A Right. 12 Q I'm going to hand you what's being 13 marked as Exhibit 2. 14 (Sample Submission Form marked as 15 Exhibit Number 2.) 16 BY MS. KENDRA SMITH: 17 Q Do you recognize this document? 18 A Yes. 19 Q And what is this? 20 A This is a lab sample submission 21 form. 22 Q Is this a form that was created by 23 the Bureau of Labs for the DEP? 24 A That is created by Bureau of Labs. 25 Q Under your lab's protocol and</p>

118

1 requirements, does each section of the sample  
2 submission sheet have to be filled out?  
3 **A I can't see which section -- not**  
4 **each section.**  
5 **Q What sections wouldn't have to be**  
6 **filled out per your lab's requirements?**  
7 **A Per my lab requirement, the lab**  
8 **use only is not for our client. The dotted**  
9 **line.**  
10 **Additional information, that's the**  
11 **client, if they want to put any additional**  
12 **information, they can. And --**  
13 **Q So that can or cannot be filled out?**  
14 **A Can or -- and we do not need**  
15 **anything about the facility name, address, we**  
16 **do not need any of that information either.**  
17 **Q You don't need any information on the**  
18 **sampling location?**  
19 **A Nope, we don't need that.**  
20 **Q Is the reason why you don't require**  
21 **that information so that there's no bias in**  
22 **testing that sample?**  
23 **A We do not need that information**  
24 **because we do not log -- when we log the sample**  
25 **in our software system, Laboratory Information**

119

1 **Management System, we do not put any of that**  
2 **information in our system. We do not need it**  
3 **in order to analyze the sample.**  
4 **Q Per your lab requirements in filling**  
5 **out this sample submission sheet, does this sample**  
6 **submission sheet have to accompany the actual**  
7 **sample?**  
8 **A That is correct.**  
9 **Q Does it have to be placed in a**  
10 **plastic bag?**  
11 **A That is correct.**  
12 **Q Why is there a requirement to place**  
13 **it in a plastic bag?**  
14 **A Because our samples are shipped**  
15 **with ice in a cooler. So if they not put it in**  
16 **a plastic bag, we get all soaked and, if they**  
17 **use ink, it will be all running down, it's hard**  
18 **to read the information required, we need to**  
19 **have.**  
20 **Q In the left-hand corner of Exhibit 2,**  
21 **it indicates, number of inorganic containers sent.**  
22 **Do you see that?**  
23 **A Yes.**  
24 **Q What information is supposed to be**  
25 **filled out in here?**

120

1 **A So with the number of sample**  
2 **containers each client collect for different**  
3 **various type of analysis, they're supposed to**  
4 **record the number of sample bottles this says**  
5 **shipped to us.**  
6 **Q And do they have to collect a**  
7 **particular number of bottles for each one of these**  
8 **things listed in the first box in the top**  
9 **left-hand corner?**  
10 **A That's correct. We require, for**  
11 **certain analysis, we need more than one sample**  
12 **bottle. Like VOC, we need two bottles. Some**  
13 **analysis do require multiple bottles. But they**  
14 **do need to record accurate number of bottles**  
15 **whatever they ship.**  
16 **Q In any of these bottles that are**  
17 **collected for the inorganic measurements that are**  
18 **listed here, do any of them have to be preserved?**  
19 **A Yes.**  
20 **Q Which ones?**  
21 **A The very first line it says number**  
22 **of unpreserved bottles. Those are the only**  
23 **unpreserved bottles. All other sample bottles**  
24 **listed below are some type of preservatives are**  
25 **used.**

121

1 **Q So if the sample collector, for**  
2 **instance, under metals, writes the number two,**  
3 **that means that there's two containers of**  
4 **preserved bottles for -- to be tested for metals?**  
5 **A That's correct.**  
6 **Q Will they also indicate in there what**  
7 **it's preserved with?**  
8 **MS. KENDRA SMITH: Excuse me. Can we**  
9 **just take two minutes.**  
10 **(Brief recess.)**  
11 **BY MS. KENDRA SMITH:**  
12 **Q So for each one of the ones that are**  
13 **listed here that a preserved bottle would be used**  
14 **for, do each of them have their own specific**  
15 **preservative to be used?**  
16 **A That's correct.**  
17 **Q And if you received a sample**  
18 **submission sheet that did not identify the**  
19 **preservative that was used for one of these**  
20 **compounds that are listed in this box, would you**  
21 **still be able to accept the sample, or would that**  
22 **not comply?**  
23 **A When we receive the sample, my**  
24 **sample receiving staff just counts the sample**  
25 **bottles. This is the procedure when we receive**

31 (Pages 118 to 121)

122

1 the samples, so let me -- so we receive the  
2 sample, we unpack the coolers, put the sample  
3 bottles on the table along with the paperwork  
4 we received with them.  
5 Staff verifies the collector ID  
6 number and the sequence number and the date of  
7 collection, check with -- they're supposed to  
8 record the same information on the sample  
9 bottle. So they verify to make sure that we  
10 have corresponding paperwork with us.  
11 They also check number of bottles,  
12 and they count the bottles also. And they have  
13 to indicate on the sample bottles, supposed for  
14 metals, they will write down M for metals so we  
15 know this bottle is for metals.  
16 If they write down N/P, like the  
17 very first one, for ammonia and phosphorus. So  
18 this is N/P, and we know that's preserved with  
19 sulfuric acid.  
20 So they identify those bottles,  
21 they count those bottles, and they verify that  
22 we received accurate number of bottles. That's  
23 all they do in sample receiving.  
24 Q So the sample collector does not have  
25 to write down in these boxes next to, for example,

123

1 metals, what preservative was put in that bottle?  
2 A No. But the analyst, when they  
3 analyze the sample, they check whatever  
4 parameters they need to check for, like, they  
5 need to check -- sample must be less than two,  
6 pH 2, then they check for the pH prior to  
7 analysis, make sure the sample is less than  
8 two.  
9 Q How is it that the sample collector  
10 knows what preservatives to use for which compound  
11 he wants your lab to test for?  
12 A We provide -- that information is  
13 on our website. And it's also, if you look in  
14 the back of the sample submission form -- they  
15 have that information on our website.  
16 Q It's not on this Exhibit 2.  
17 A No. But they say, I just want to  
18 go to, preservative abbreviation is there, so  
19 they put this abbreviation on the bottles. So  
20 that's how we know.  
21 Q And so what's showing on Page 2 of  
22 the exhibit is just what abbreviation should be  
23 marked on the bottle itself?  
24 A On the bottles.  
25 Q But it doesn't show what

124

1 preservatives should be used?  
2 A That is on our website.  
3 Q And so how would your lab know if an  
4 improper preservative was used, for instance, for  
5 a metal sample? If there's no notation what the  
6 sampler used on this form.  
7 A I don't know the answer to that  
8 question right now.  
9 Q Is that answer in some manual or  
10 document or something where someone knows?  
11 A Yeah.  
12 Q Where would that be?  
13 A I don't know right now.  
14 Q For instance, if you receive a  
15 preserved sample to be tested or analyzed for  
16 metals, your lab does -- there's no way for your  
17 lab to tell whether or not the proper preservative  
18 was used for metals --  
19 A No --  
20 Q -- in that container?  
21 A I don't know the answer to that  
22 question, but we do check the pH, that's a  
23 requirement, that the pH less than two, that  
24 met -- it met our acceptance criteria. Our  
25 analyst will analyze the sample.

125

1 Q So does that pH less than two  
2 indicate to you what preservative was used?  
3 A That will indicate that sample was  
4 supposed to be acidic and it is acidic per  
5 requirement.  
6 Q So it doesn't tell you anything about  
7 what the preservative was.  
8 A No.  
9 Q Let's say a metal sample was sent to  
10 your lab and the wrong preservative was used,  
11 would that alter the results, the analytical  
12 results, for metals in that particular sample?  
13 A I have not done metal analysis, so  
14 I can't answer that question right now.  
15 Q If the, again, using the metals as an  
16 example, if a sample was sent to you to be  
17 analyzed for metals and a preservative wasn't  
18 added as it should have been, would that alter the  
19 analysis of that water sample?  
20 A Yes.  
21 Q How?  
22 A I can answer that question. So  
23 the reason we want to add the preservative for  
24 water, that means the reason we add  
25 preservative is to preserve whatever analytes

<p style="text-align: right;">126</p> <p>1 you're looking for. When you – the 2 requirement is to preserve the sample is 3 because the preservative that is used will keep 4 the analyte in the water. 5 Q So it keeps it from escaping? 6 A Escaping, it can't stick to the 7 wall of the bottles. And so when we have 8 required preservative, that will keep it in the 9 water sample. 10 Q And so if a preservative is not used, 11 again, using the example of metals, and it's being 12 analyzed for metals, and you run the analysis, the 13 analysis won't be accurate because there will be 14 less metals? 15 A But we will not analyze the sample 16 if it is not preserved unless we have – our 17 client says it's okay to analyze and they want 18 information. 19 Because our analyst checks the 20 preservation prior to analyzing samples. When 21 they get the sample, they check the pH of the 22 sample. 23 If that sample doesn't meet our 24 acceptance criteria for pH, they will inform 25 the client. And they will say your sample that</p>	<p style="text-align: right;">128</p> <p>1 Q Yes. 2 A No. That's different. 3 Q And so when your lab receives the 4 samples and they verify in this box with their lab 5 initials, what they're verifying is that they have 6 received the number of bottles contained in here? 7 A That's correct. 8 Q And what they're to be tested for, 9 they're marked on the bottle itself, metals -- 10 A Correct. 11 Q They are not verifying that the 12 proper preservative was used. 13 A No. 14 Q That's correct? 15 A That is correct. 16 Q And they're not verifying that 17 preservatives were actually used. 18 A That is correct. Not at the -- 19 not at the time of sample receiving. At the 20 sample receiving, they are just counting 21 bottles, making sure that we have whatever 22 number of bottles they received is all 23 documented in a sample submission form. 24 Q So when they write down the collector 25 ID number, everyone who is a sample collector at</p>
<p style="text-align: right;">127</p> <p>1 you submitted is not the required pH, do you 2 want us to analyze the sample, or do you want 3 to cancel. The same thing when we receive the 4 sample. So that's, even -- so if they want for 5 information purpose, we analyze and we flag the 6 data. 7 Q Sure, I understand that. So if, for 8 instance, again, using the example of metals was 9 asked to be analyzed in a water sample, and the 10 collector put that under the metals box that he's 11 submitting to you two samples that are preserved 12 but then doesn't put the preservative in, when you 13 run that analysis, will there be less metals in 14 that sample than otherwise would be because 15 they're stuck to the walls or have escaped? 16 A This is possible. 17 Q So the pH, if there is no sample put 18 into the metals collection when they are -- or the 19 water when they're submitting it, if there's no 20 preservative with that, and they want you to 21 analyze for metals, will that pH test tell you 22 whether there's a preservative in the sample or 23 not? 24 A The pH test that's listed in here 25 (indicating)?</p>	<p style="text-align: right;">129</p> <p>1 the DEP has a particular number assigned to them, 2 correct? 3 A That's correct. 4 Q So that number corresponds with an 5 actual person. Correct? 6 A That's correct. 7 Q So what does the sequence number 8 stand for? 9 A Sequence number is that any three 10 digit number, they identify that particular 11 sample. The unique ID for the sample is the 12 collector ID number, sequence number and the 13 date of collection. 14 Q And are those particular numbers used 15 actually later as a lab sample ID number? Or is a 16 separate number created? 17 A That's a separate number. 18 Q Under the middle box, organic bottles 19 sent, again it has a list of unpreserved and 20 preserved? 21 A Um-hmm. 22 Q And each of the -- in the first 23 column, all of those are types of containers, 24 correct? 25 A That is correct.</p>

130

1 Q And so those types of containers that  
2 are there, those can be submitted, a sample can be  
3 submitted in those types of containers either  
4 preserved or unpreserved, correct?  
5 A **Depending on the method requirement.**  
6 Q Under what circumstances, for  
7 instance, if you were sent a water sample to test  
8 for VOCs, under what circumstances would a VOC  
9 sample be unpreserved versus preserved?  
10 A **I don't know the answer to this**  
11 **question because there is specific answer to**  
12 **the question. So I don't remember what is the**  
13 **requirement for VOC analysis. I just remember**  
14 **it's just two VOC bottles that we need.**  
15 Q Depending upon, again, what's being  
16 requested here, that determines the amount of  
17 bottles and the preservative that's used, is that  
18 right?  
19 A **Can you repeat that question,**  
20 **please.**  
21 Q Under the middle box where it has  
22 organic bottles sent, the number of bottles and  
23 the preservative that might be used in those,  
24 that's what's -- that's all that's being requested  
25 here, correct?

131

1 A **Yeah. That -- this particular**  
2 **area just is a communication between the field**  
3 **staff and us just to inform us that this many**  
4 **bottles we are submitting for analysis.**  
5 I mean, it's says 60 mL, one liter  
6 amber that could be used for any semi-volatile,  
7 pesticides, or PCB. So, I mean, this is just  
8 indicating how many numbers of bottles is  
9 submitted, and we just have to verify that we  
10 received those number of bottles.  
11 Q So under the organic section here, it  
12 doesn't have anywhere to specify what they want  
13 your lab to test for.  
14 A **Not under that specific organic**  
15 **bottles sent, not there.**  
16 Q So when your lab staff member gets  
17 the samples in and verifies, puts their initials  
18 in this box, all they're verifying is that the  
19 number of samples indicated on this sheet arrived,  
20 and they arrived in the bottles that are  
21 indicated, is that correct?  
22 A **Correct.**  
23 Q And then there's a lab use only  
24 section with the dots on there. And then it has  
25 lab number. When does this sample get a lab

132

1 number assigned to it?  
2 A **At the sample receiving.**  
3 Q How is that lab number coded? Is it  
4 just a numerical?  
5 A **It's a year, 2012, if it's organic**  
6 **sample, it says OO, and the numeric number.**  
7 Q What if it's inorganic?  
8 A **I. It has -- we stamp the number**  
9 **on it, but in our Laboratory Information**  
10 **Management System, which is, we call LIMS, it's**  
11 **designated as I for inorganic. So it 2012 I**  
12 **and the sequence number.**  
13 Q Going down to the next line, we went  
14 through collector ID, sequence, and the date  
15 collected is the actual date that the sample is  
16 drawn from whatever source, correct?  
17 A **That's correct.**  
18 Q And the time is the time that it was  
19 actually drawn, correct?  
20 A **Correct.**  
21 Q And then we get to the next line,  
22 which is reason code. What is the reason code?  
23 A **The reason the sample is**  
24 **collected. I just remember one is normally**  
25 **used routine samples.**

133

1 Q One is routine sample. Would 4 be as  
2 a result of a complaint, a 04?  
3 A **I don't know.**  
4 Q Would that be in your manual that the  
5 sample collector would use? Would that  
6 information be in there, would it be on your  
7 website?  
8 A **I don't remember whether it's on**  
9 **our website or not, but it can be available.**  
10 **We have a list of reason codes. I don't know**  
11 **where it is right now.**  
12 Q Whoever is at your lab could look up  
13 that reason code and see what the numerical  
14 equivalent for that reason was?  
15 A **We not supposed -- that's not our**  
16 **judgment, what code they need to use. Because**  
17 **our collector client collects the sample, they**  
18 **know what reason they are collecting the sample**  
19 **for. So they determine which code to use.**  
20 Q Right, I understand that they pick  
21 the code, the sampler picks the code, correct?  
22 A **Correct.**  
23 Q And so your lab could look up the  
24 number 01 and know that that was a routine --  
25 A **Yes.**

<p style="text-align: right;">134</p> <p>1 Q -- sample collected.</p> <p>2 A Yeah.</p> <p>3 Q Then the cost center code, what does</p> <p>4 that stand for?</p> <p>5 A That's for our billing purpose.</p> <p>6 Q And so that indicates who is going to</p> <p>7 receive the bill for the lab analysis that your</p> <p>8 lab does?</p> <p>9 A Yeah, which program is going to</p> <p>10 bill for.</p> <p>11 Q So under that, are all of the</p> <p>12 departments within the DEP, do all of those have a</p> <p>13 cost center code to your knowledge?</p> <p>14 A Yeah, we establish a -- yeah.</p> <p>15 Q Who came up with the cost center</p> <p>16 code?</p> <p>17 A Well, our program request a new</p> <p>18 cost center, and they provide the information</p> <p>19 required to create a new cost center. And we</p> <p>20 create this -- we just create the three digit</p> <p>21 number in order to cost center, for the billing</p> <p>22 purpose.</p> <p>23 MR. WATLING: If you need to take</p> <p>24 a break at all, you can take a break.</p> <p>25 BY MS. KENDRA SMITH:</p>	<p style="text-align: right;">136</p> <p>1 Q Right. But the cost center code,</p> <p>2 program code, reason code, suite code, all of that</p> <p>3 information is available to the people at the</p> <p>4 Bureau of Labs to look up?</p> <p>5 A Yes.</p> <p>6 Q Then there is a section that says</p> <p>7 legal seal number. Could you tell me what that's</p> <p>8 used for?</p> <p>9 A Well, it is up to our client if</p> <p>10 they choose to use the legal seal number. If</p> <p>11 they choose to use the legal seal on the sample</p> <p>12 container, they can apply a legal seal on the</p> <p>13 top of the sample bottle.</p> <p>14 There's a specific unique number</p> <p>15 on that. They're supposed to document that on</p> <p>16 our sample submission form.</p> <p>17 Q And what are the reasons to use a</p> <p>18 legal seal?</p> <p>19 A I don't know. It's up to them.</p> <p>20 They want to use it, they can use it, for any</p> <p>21 reason.</p> <p>22 Q So you don't --</p> <p>23 A No.</p> <p>24 Q You don't have any idea why that</p> <p>25 might be?</p>
<p style="text-align: right;">135</p> <p>1 Q Again, the cost center code, there</p> <p>2 would be a specific code that would indicate, for</p> <p>3 instance, cost center code 288 is for Marcellus</p> <p>4 shale operations, or Marcellus shale drilling?</p> <p>5 A I don't know. Usually, like, we</p> <p>6 receive samples from State park, and we bill to</p> <p>7 State park so we have a specific code for State</p> <p>8 park.</p> <p>9 I'm just -- and that's how we use.</p> <p>10 So any samples that we receive from State park,</p> <p>11 we bill to DCNR or State park. And that's</p> <p>12 what -- it is, like, different program have</p> <p>13 their own code. That's how we --</p> <p>14 Q So actually, the program code would</p> <p>15 indicate what department within the DEP is --</p> <p>16 A Correct.</p> <p>17 Q -- requesting the sample, and the</p> <p>18 cost center code would say what it's for.</p> <p>19 A What is it for, yeah.</p> <p>20 Q Okay.</p> <p>21 A But for us, we just need three</p> <p>22 digit number. It has nothing to do with</p> <p>23 analysis. It has nothing to do with our</p> <p>24 analyst. It is just for the billing purpose.</p> <p>25 So we can bill this.</p>	<p style="text-align: right;">137</p> <p>1 A We don't require them to use the</p> <p>2 legal seal.</p> <p>3 Q Any of the methods that your lab uses</p> <p>4 to analyze water samples, do any of them require a</p> <p>5 legal seal?</p> <p>6 A We do not require the legal seals.</p> <p>7 Q Do any of the methods that your lab</p> <p>8 uses --</p> <p>9 A No.</p> <p>10 Q -- to test water by, does that</p> <p>11 require a legal seal?</p> <p>12 A No.</p> <p>13 Q Again, you pointed out that the</p> <p>14 dotted line box that's all around a couple of</p> <p>15 different things is for lab use only.</p> <p>16 A Um-hmm.</p> <p>17 Q If we could start to the right first,</p> <p>18 the legal seal number, what your lab is indicating</p> <p>19 there is whether or not that was intact when it</p> <p>20 was received, is that correct?</p> <p>21 A That is correct.</p> <p>22 Q And so if it's not intact, there's an</p> <p>23 N, and then the initials of the person next to it</p> <p>24 who received it?</p> <p>25 A That's correct.</p>

138

1 Q And so we talked a little bit about  
2 the middle one, which is pH less than two. That's  
3 a sample that the lab runs when they receive it to  
4 make sure that the pH is less than two in the  
5 sample that's about to be analyzed, is that right?

6 A Yes, if the sample is required to  
7 preserve to pH less than two, the analyst  
8 documents that, yes, it was pH less than two.

9 Q What samples would require a pH less  
10 than two?

11 A I have no idea of analysis. There  
12 are many. I don't remember the whole list.

13 Q And so what about the temperature?

14 A Temperature is that there are  
15 certain analysis that when we receive the  
16 sample must be iced and has to have temperature  
17 less than six degrees.

18 So when we receive the sample, the  
19 first thing our sample receiving staff does,  
20 checks the temperature when we receive it in a  
21 cooler to make sure that they are less than  
22 six.

23 So if it is -- doesn't meet our  
24 requirement of less than six, they document  
25 that on sample submission form, the sample was --

139

1 Q Okay. And what type of analysis  
2 would require the water sample to be less than  
3 six?

4 A Almost all organic analysis,  
5 inorganic analysis.

6 Q Again, would this be the situation  
7 that if you received a sample requesting inorganic  
8 analysis and it was above the six degree celsius  
9 mark, would that be something that you would  
10 indicate to the client, that it wasn't received  
11 properly, at the proper temperature, and they make  
12 the decision whether to run the sample or void it?

13 A That's correct. And it will be  
14 documented in a sample -- on the sample report  
15 as well, the sample was -- did not meet the  
16 temperature correctly.

17 Q What about the residual chlorine?

18 A That is something that is not  
19 required by all analysis. That's only sample,  
20 few sample analysis that they need to check,  
21 and they just document it.

22 Q Which sample analysis require the  
23 residual chlorine?

24 A I don't remember.

25 Q The matrix code, what is that?

140

1 A That's if the sample is water,  
2 then we put matrix code as one. If it's soil,  
3 then we put nine. That's just for the log in  
4 purpose.

5 Q Going back just a second to the  
6 reason code, cost center code, program code and  
7 the suite code, if any of that information is not  
8 filled out, can you still run the sample and test?

9 A We -- no. We need to have that  
10 sample in order to log the sample.

11 Q And the suite code, that would refer  
12 to the method upon which the sampler wants you to  
13 test or analyze the water?

14 A Suite code is the list of analytes  
15 that my client wants us to analyze for.

16 Q And so that could be volatile organic  
17 compound, semi-volatile organic --

18 A Correct.

19 Q -- compound or just a general water  
20 chemistry?

21 A Yeah, there are standard analysis  
22 code that we have established. And our client  
23 will use those codes for us to analyze those  
24 samples.

25 Q Then the additional information box,

141

1 would a sampler fill in additional things to be  
2 analyzed for that wouldn't necessarily be in that  
3 suite code?

4 A That's correct.

5 Q And so they would actually list the  
6 additional compound to be tested for.

7 A Yes, that's correct.

8 Q And then you said you don't need the  
9 facility name, address, city, sampling location.  
10 Why is it on the document?

11 A It's for our client if they want  
12 to have their own record because they're  
13 supposed -- they can use for whatever record  
14 they need to keep. It's for them. It's not  
15 for us.

16 Q And then what about the chain of  
17 custody here, and it says relinquished by sampler  
18 collector. And they're supposed to print their  
19 name and their phone number?

20 A That's correct.

21 Q And so if there's an issue with  
22 regard to chain of custody, does your lab, when  
23 they receive it, call that sampler?

24 A That's correct.

25 Q So they know by the collector ID and

36 (Pages 138 to 141)



142

1 this chain of custody who it is that collected the  
2 sample.  
3 A That's correct.  
4 Q Does your lab have to fill in  
5 anything in this box?  
6 A Yeah, when we receive the sample,  
7 we have to have initial on the sample  
8 submission form, whoever processed that sample  
9 in sample receiving.  
10 So if they put the initial right  
11 next to the sample submission form, we accept  
12 it as -- basically when it says received at the  
13 Bureau of Laboratories, it means somebody needs  
14 to sign it that who received it and which date  
15 we received it.  
16 So it's either here, or it is  
17 somewhere in the lab that they have initialled  
18 and a date that they received the sample.  
19 Q And that's the only thing that the  
20 Bureau of Labs fills out on there, is that  
21 correct?  
22 A Yes.  
23 Q For each sample that is submitted to  
24 your lab for analysis, is the sample collector  
25 required to fill out a sample submission sheet for

143

1 each sample submitted?  
2 A That is correct.  
3 Q And so if you get a sample submission  
4 sheet that has organics listed to be tested for  
5 and inorganics listed to be tested for, that would  
6 not be filled out properly, correct?  
7 A That is not correct.  
8 Q Okay, why not?  
9 A Because for organic and inorganic  
10 samples, basically the requirement for us to  
11 receive the sample remains the same.  
12 So our client can write down, say  
13 inorganic SAC code 942, and then he also  
14 submits a sample for your analysis, instead of  
15 filling out another sample submission form, he  
16 can just write down VOA DW down here.  
17 We said okay, we received the  
18 sample for 942 and VOA DW, but our sample  
19 receiving staff will make a copy of this and  
20 will give it to organic staff in order to go  
21 with whatever requirement they have, for  
22 example, receiving. So they will just make a  
23 copy.  
24 We encourage them to have two  
25 sample submission forms, but if they choose to,

144

1 they can use the same sample submission form  
2 and inform that this is 942 and VOA DW.  
3 Q So even though it indicates in your  
4 instructions on the second page that you should  
5 use separate sample submission sheets if you're  
6 sampling for organic chemistry, inorganic  
7 chemistry or radiation measurements, that's not --  
8 A We said should, not must, so.  
9 Q I just missed --  
10 A Yeah, I'm just saying that it is  
11 not must. We encourage them, as I say.  
12 Q Based upon your procedures and  
13 protocol, I mean, other than the collector ID, the  
14 sequence number, the date collected, the time  
15 collected, and the reason, cost center, program,  
16 and suite code, any other -- and the bottles, the  
17 number of bottles and whether they're preserved or  
18 unpreserved, any other things that must be filled  
19 out that if are not, they're not compliant?  
20 A We also need, in order to be  
21 compliant, this complete chain of custody as  
22 well. That's a certification requirement. But  
23 they have to provide the name and the phone  
24 number and signature.  
25 Q When this is filled out, does it fill

145

1 out who the courier is and how it was sent?  
2 A No, this is filled out with a  
3 collector name and a phone number.  
4 Q And then at the bottom of it, it says  
5 how shipped, courier sample, hand delivered. So  
6 does he -- is it required for the chain of custody  
7 that he indicate to you whether it was hand  
8 delivered or --  
9 A That's correct.  
10 Q One of those two boxes have to be  
11 marked?  
12 A That is correct.  
13 Q And that's done by the sample  
14 collector.  
15 A That's correct.  
16 Q Anywhere on the sample submission  
17 sheet, is there -- does anyone at the lab write  
18 down on here that this water is coming from a  
19 public water source? I don't see a box for that.  
20 A Correct. If this is for public  
21 water supply, our client is supposed to provide  
22 seven digit identification number for public  
23 water supply.  
24 And they have to -- that's their  
25 responsibility to inform us that this is a

37 (Pages 142 to 145)

146

1 public water supply sample.  
2 When we log the sample in, when we  
3 see that seven-digit number, we find that this  
4 is a public water supply sample, and then when  
5 we log the sample in our Laboratory Information  
6 Management System, we indicate that it is a  
7 drinking, DI – I mean, SDWA sample.

8 Q And so if the sample collector  
9 doesn't indicate that it's from a public water  
10 source, there's no way for your lab to know, is  
11 that correct?

12 A Yeah, that's correct.

13 Q And so then there would be no way for  
14 your lab to be able to report that, not only to  
15 the client, but also to the public water source,  
16 correct?

17 A That is correct. But this is  
18 supposed to indicate this is a drinking water  
19 sample.

20 Q When you receive a sample in and it  
21 indicates to your lab what they want you to sample  
22 for, does the lab have any discretion in terms of  
23 what it samples the water for? Or can it only  
24 sample for that which is indicated on the sample  
25 submission sheet?

147

1 A I don't understand.

2 Q In other words, if you get a sample  
3 submission sheet and it says I want you to test  
4 for methane, that's the only thing on it, could  
5 your lab independently also run it for metals?

6 A No. Absolutely not.

7 Q And why wouldn't they be able to do  
8 that?

9 A It's our client choice. We just  
10 do what they wanted us to analyze it for. It's  
11 not our judgment or requirement. And it costs  
12 money. You don't want to do free testing.

13 Q Once you have received the sample,  
14 done the analysis, you said the Chemist 1 and 2  
15 then approve it and it prints. And when that  
16 prints, it's sent to the client?

17 A Let me explain the procedure.

18 Q Okay.

19 A So we have Laboratory Information  
20 Management System, which is, in short, called  
21 LIMS, L-I-M-S. The sample will get logged in  
22 the LIMS system, and an analyst analyze the  
23 sample, enters the data in the LIMS, reviews  
24 it, the quality control and everything, and  
25 then approves the data once everything meets

148

1 all of our requirements.

2 Once the data is approved, that  
3 information gets uploaded to our central  
4 software system. The system is called S-I-S,  
5 Sample Information System. And that generates  
6 a final report.

7 Q When the sample is tested, let's say  
8 for metals, and the results are approved and then  
9 those results are sent to the SIS, that SIS has  
10 all of the metals that were tested for, all the  
11 compounds that were tested for?

12 A That SIS has all the metals that's  
13 requested to be tested for.

14 Q So, for instance, if only certain  
15 metals were requested, and the method used to test  
16 for those metals had, let's say, 15 different  
17 types of metals, but only five were requested, the  
18 information uploaded to the SIS would be only the  
19 metals that were requested, not the --

20 A Yes.

21 Q -- entire 15.

22 A That's correct, only those five.

23 Q Why is that?

24 A It just uploads the data. It's  
25 not a software that has everything. It is just

149

1 a system in which it uploads our requested  
2 analysis results to that system.

3 And that system is such that it  
4 has our client e-mail address and all that. So  
5 once the sample is completed, they  
6 automatically get the e-mail that your report  
7 is ready. And they get the e-mail for the  
8 report. So that's how we do ours. It has  
9 nothing to do with the analysis.

10 Q So if, for instance, a sample  
11 collector asked for metals to be tested for and  
12 indicates the suite code, that collector knows  
13 that there's 15 metals to be tested for, but is  
14 telling you only the specific ones that he wants?

15 A No. That's not true.

16 Q Okay.

17 A That SAC code which is created has  
18 a list of metals that my client wants us to  
19 analyze. And that's the only -- that has whole  
20 list. It's not that we pick from that as SAC  
21 code and analyze only for five.

22 When we log the sample for 942,  
23 and 942 has ten metals, that he will be -- we  
24 will report ten metals.

25 If my client wants only five

150

1 metals, we will not use that code. We will  
2 just log the sample with only those five  
3 metals.

4 Q And so on the final report, again  
5 using metals as an example, if they logged in a  
6 suite code for metals that tested for ten, and  
7 they indicated in the additional information they  
8 only wanted you to test for five, on this SIS that  
9 generates the report and e-mail to the client,  
10 what would be reported?

11 A Well, if they want only those five  
12 metals to be tested, we will not use that SAC  
13 code. We will log the samples only for those  
14 five metals.

15 So we don't -- okay, let me  
16 explain to you. The SAC code is for  
17 convenience. So we do not have to log each and  
18 every test manually.

19 So for -- we get routine samples,  
20 we got routine, like -- so it's easier for us  
21 to just log that three digit code, it will pop  
22 up all the requested analysis.

23 But sometimes our client wants  
24 only certain analysis, which is not created  
25 in -- the SAC is not created for that. We can

151

1 manually enter those tests and only test for  
2 those five analysis. That's what we do.

3 Q So if a sample collector indicated  
4 again a suite code for metals, and it's 15 metals,  
5 that's what the analysis is done for, all the  
6 sample results for all of those metals would be  
7 reported on this SIS system and e-mailed to the  
8 client, correct?

9 A On a routine basis, yes.

10 Q What's a non-routine basis that that  
11 would happen?

12 A I don't -- I can't answer your  
13 question because there are a lot of reasons,  
14 you know, I mean.

15 Q Is there any that you have come  
16 across during the course of your career with the  
17 DEP?

18 A No. I always tell that I don't  
19 want to pick and choose a test from SAC's. If  
20 you want a specific analysis, just put it in  
21 additional information, we will log it in with  
22 an open code, and we just add it manually. But  
23 that's what normally I do. But I don't know  
24 anything other -- any specific example.

25 Q Would it be accurate to say that

152

1 anything that the DEP or the Bureau of Labs  
2 analyzes for and gets results for on compounds  
3 would be reported in the SIS system to the client?

4 A That's right.

5 Q And so there would never be a  
6 situation where, for instance, a metals code was  
7 entered for 15 metals, only five of them were  
8 reported to the client instead of all ten, is that  
9 correct?

10 A Bureau of Labs reports the results  
11 for which the sample is logged for.

12 Q So when they run that sample, all of  
13 the compounds that they get back, along with the  
14 number for each one of those compounds, is entered  
15 into this SIS, and the client gets a copy of that.

16 A Whatever our client requests,  
17 whatever analysis our client requests, the  
18 sample gets logged into LIMS system for those  
19 requested tests, and those requested tests are  
20 reported in SIS.

21 Did that answer the question?

22 Q Yes. So there's never a situation  
23 where the Bureau of Labs themselves would hold  
24 back any analysis of any compounds that they found  
25 that were requested --

153

1 A No.

2 Q -- by the sample submission sheet by  
3 the client?

4 A No.

5 Q Other than the client and a public  
6 water source, does the Bureau of Labs ever send  
7 their final report out to homeowners, out to  
8 wherever the sample collector collected the water  
9 from?

10 A Only for microbiology analysis.  
11 We do microbiology analysis, and we accept  
12 samples from homeowners for bacteriological  
13 analysis. And then we get their phone number  
14 and their e-mail address, and we just send them  
15 the reports.

16 That's the only test that I'm  
17 aware, we reported those directly to  
18 homeowners.

19 Q Then you had mentioned earlier the  
20 term holding time. Could you tell me what you  
21 mean by holding time?

22 A Certain test requires for  
23 reference method to be analyzed within a  
24 certain time period. That's what I meant by  
25 the holding time.

154

1 Q What's the purpose of that, why do  
2 some of them have a shorter window to test or  
3 analyze more than others?

4 A That's a EPA requirement.

5 Q So you don't know the background of  
6 why that is?

7 A No.

8 Q You just follow that?

9 A We just follow the reference.

10 MR. WATLING: I'm going to make an  
11 ongoing continuing objection as to form that  
12 she won't be providing anything but testimony  
13 regarding her work at the Bureau of Labs and  
14 she would not be providing expert testimony for  
15 use by Appellants.

16 MS. KENDRA SMITH: I think we had  
17 this discussion before the Judge. And I think  
18 what he had said was people who have certain  
19 knowledge that maybe the lay person doesn't  
20 have, that's fair game.

21 Asking for an expert opinion I  
22 understand not to be within the purview of the  
23 purposes, but in terms of information and  
24 experience and firsthand knowledge, that's well  
25 within the purview of the deposition.

156

1 A If the holding time exceeded for  
2 particular analysis, that meant that they did  
3 not make the method requirement. And that's  
4 what we want to indicate, that this method  
5 requires the sample to be analyzed within such  
6 a timeframe and did not make so. We are  
7 just -- they are just following the reference  
8 method, that's all.

9 Q By the reference method, it would be  
10 invalid because the timeframe to test within was  
11 exceeded.

12 A What it means is that it does not  
13 meet the method requirement.

14 Q And so once that happens and a  
15 holding time is exceeded, is there any type of  
16 notification that has to happen as a result?

17 A Yes. We notify the client that  
18 your sample has exceeded the holding time,  
19 would you still like to have the sample results  
20 or sample -- would you like us to analyze the  
21 sample.

22 And if they would choose us to  
23 analyze the sample, the sample says on the  
24 final report is noted by the sample exceeded  
25 the holding time.

155

1 (Brief recess.)

2 BY MS. KENDRA SMITH:

3 Q When we took the break, we were  
4 talking about holding times.

5 A Yes.

6 Q And that there are different holding  
7 times depending upon what the sample is going to  
8 be analyzed for.

9 A Um-hmm.

10 Q We had talked a little bit earlier  
11 that if the holding time is exceeded, that the  
12 client is given the option of either running the  
13 sample or cancelling the sample altogether,  
14 correct?

15 A That is correct.

16 Q And do you know why it is that the  
17 client is given that option and the department  
18 just says no, you can't run it?

19 A I don't know. I don't know the  
20 answer to that.

21 Q And if, for instance, the holding  
22 time is exceeded on an analysis that the client  
23 wants you to do on a water sample, does it render  
24 that whole analysis for the particular holding  
25 time that was exceeded invalid?

157

1 Q I'm handing you what's being marked  
2 as Exhibit 3.

3 (Request to Analyze Voidable Samples  
4 marked as Exhibit Number 3.)

5 BY MS. KENDRA SMITH:

6 Q Do you recognize that document?

7 A Yes.

8 Q And what's the purpose of this  
9 document?

10 A This document is a follow-up  
11 communication from us to our client that when  
12 sample doesn't meet our acceptance criteria, to  
13 inform what the violation is, or what  
14 acceptance criteria is not met.

15 And it gives an option to our  
16 client whether they would like us to cancel the  
17 sample, or they would like to have the data  
18 with a qualifier on it.

19 Q And does this form, is this form  
20 required to be filled out so that the procedure  
21 being used for the sample is compliant with the  
22 lab's protocol, procedure and the NJ NELAP?

23 A That is correct. We need to have  
24 this from the client, and then we attach it  
25 with our sample submission forms.

158

1 Q And for each sample where a holding  
2 time has been exceeded or some other error has  
3 occurred, a wrong bottle was used, does a Request  
4 to Analyze Voidable Samples, Exhibit 3, have to be  
5 filled out for each one of those instances?

6 A What each --

7 Q So, for instance, if you had a sample  
8 that came to you, and the holding time was  
9 exceeded, and it was collected in an improper  
10 bottle or container, would both of those instances  
11 be listed on one of these Request to Analyze  
12 Voidable Samples forms, or would there have to be  
13 two separate?

14 A I don't remember. I don't deal  
15 with this every day, so I don't know that. But  
16 it -- I can tell you that we definitely need,  
17 any of those instance, we need to have this  
18 filled form out, one for each, for each.

19 Q And with regard to this Request to  
20 Analyze Voidable Samples, is it referred to as an  
21 RTA form? Have you heard that before?

22 A RT --

23 Q RTA form?

24 A What RTA means? What --

25 Q That's how it was referenced in one

159

1 of the documents I was looking at. Request to  
2 Analyze, but they don't put the voidable sample  
3 part. Have you ever heard that used in the lab,  
4 RTA form?

5 A I don't remember, honestly. I  
6 don't deal with this every day, so I -- no, I  
7 don't remember.

8 Q On this particular form, it indicates  
9 that there's a conversation between you and your  
10 client, correct?

11 A That's correct.

12 Q The first line indicates, says that  
13 you have had a telephone conversation?

14 A That's correct.

15 Q So in this form, it also indicates  
16 the understanding of why this sample doesn't meet  
17 the laboratory's acceptance policy guidelines, is  
18 that correct? Do you see that? In the middle of  
19 the page?

20 A Yes.

21 Q Is it on this lab that the staff  
22 member from the Bureau of Labs who is having this  
23 conversation with the client would record why it  
24 is that the sample does not meet the laboratories  
25 sample acceptance policies?

160

1 A Can you repeat that question for  
2 me once? I was reading this.

3 Q Sure. On this, in the middle of the  
4 page, there's a section that says: I understand  
5 the above samples do need meet the Bureau of  
6 Laboratories sample acceptance policy guidelines.  
7 And then it says state reason. Did I read that  
8 correctly?

9 A That's correct.

10 Q So when the staff member from the  
11 Bureau of Labs is having a conversation with the  
12 client, is it that Bureau of Labs' staff member  
13 who is filling out the because, the reason why  
14 this sample fails the laboratories sample  
15 acceptance policy guidelines?

16 A Here we record which description,  
17 which acceptance criteria did not meet our  
18 Bureau of Labs' acceptance policy.

19 Q So, for instance, if it were holding  
20 time, what would be listed here is holding time  
21 exceeded?

22 A Correct.

23 Q If it was the wrong bottle that was  
24 collected, wrong bottle used.

25 A That is correct.

161

1 Q Then it also indicates this action  
2 took place on. Is that referencing the date that  
3 the conversation took place regarding the sample?

4 A I don't know about that.

5 Q Then at the bottom it indicates here  
6 and says: I am aware that this sample, sample or  
7 samples, would normally be voided. Do you see  
8 that?

9 A Yes.

10 Q Who signs at the supervisor's  
11 signature line there? Is it a lab personnel, or  
12 is it the client that signs?

13 A This is client.

14 Q What they're certifying by signing  
15 this is that they understand that this is a  
16 voidable sample.

17 A That is correct.

18 Q And they're also signing saying that  
19 they understand that the labs' acceptance policy  
20 guidelines for this particular sample have been  
21 violated.

22 A That is correct.

23 Q So once this conversation takes  
24 place, is this form e-mailed to the client for  
25 them to sign? How does that work?

41 (Pages 158 to 161)

162

1 A Yes.  
2 Q So it's e-mailed for the client to  
3 sign. Do they e-mail it back?  
4 A They can e-mail us back. And we  
5 document that in our records.  
6 Q Then is this form then attached to  
7 any printable result for this particular sample?  
8 So in other words, would it be attached to a final  
9 report result, this actual form?  
10 A This form will not be attached to  
11 the final report, but the final report will  
12 have a qualifier whatever criteria was not met.  
13 What this form will be attached to are sample  
14 submission forms.  
15 Q So this gets attached to the sample  
16 submission form that corresponds by number.  
17 A That's correct.  
18 Q And this sample, this request to  
19 analyze voidable samples, this is something that  
20 would be retained within the labs' database  
21 specifically with regard to this sample it's  
22 referencing, is that correct?  
23 A We -- I don't know -- I don't know  
24 the answer to that question right, how we  
25 retain them. We do retain them, but I don't

163

1 know right now at this time.  
2 Q But at some point it gets attached to  
3 the sample submission sheet.  
4 A Yes.  
5 Q With regard to the SIS system we were  
6 talking about, who has access to that system? Is  
7 it just Bureau of Labs employees? In order to  
8 enter the results.  
9 A We don't enter the results  
10 actually. Bureau of Lab employee, they do not  
11 enter the results in SIS. It gets uploaded to  
12 SIS from our LIMS system.  
13 Q And so the system, the LIMS system  
14 that contains all of the lab analysis that was  
15 done on a particular sample, who has access to  
16 that database?  
17 A To make -- for the lab results?  
18 Q Yes.  
19 A Our IT people, they maintain the  
20 database, they have access to the database.  
21 Q Okay.  
22 A We can review the results, if  
23 that's what you mean.  
24 Q No, I actually mean who would have  
25 results to put the -- who would have access to put

164

1 the results into that system?  
2 A The results gets uploaded,  
3 literally. We do not -- nobody enters any data  
4 in SIS.  
5 Q In SIS, when it generates a form  
6 report that's sent to the client, can that form  
7 report, once it's in SIS, be altered in any way by  
8 anyone?  
9 A In SIS? No. Not the lab data.  
10 Unless -- if any correction needs to be made,  
11 it has to be made in LIMS. And that -- not in  
12 SIS.  
13 Q So the original database that carries  
14 all of the analytical results, a correction would  
15 have to be made in there for that correction to  
16 show up in SIS.  
17 A That is correct.  
18 Q And who has access to that LIMS  
19 system?  
20 A Chemists and section chiefs,  
21 myself.  
22 Q Anyone else?  
23 A And our IT person, of course.  
24 Q Do any of the departments within the  
25 DEP, for instance, the Oil & Gas Division, would

165

1 they be able to have access to LIMS?  
2 A No.  
3 Q Would they be able to request access?  
4 A No.  
5 Q And who safeguards that? Who is the  
6 person that says no, you can't have access to it,  
7 only these people have access?  
8 A We do. We -- it's my director  
9 decides who can give access to LIMS.  
10 Q Has anyone ever made a request to you  
11 from any department in the DEP to have access to  
12 LIMS?  
13 A No.  
14 Q Do you know whether or not anyone has  
15 ever made a request to your supervisor to have  
16 access to LIMS?  
17 A Not that I know of.  
18 Q When you -- once the data is uploaded  
19 to the SIS and that's e-mailed over to the client,  
20 the client has to print it, correct? I mean, if  
21 they want a hard copy, they would have to print  
22 it.  
23 A Yeah.  
24 Q Once they receive that e-mail, can  
25 they leave off anything that was reported to them

42 (Pages 162 to 165)

166

1 in that report through SIS?  
2 **A I don't know. I can't -- I don't**  
3 **know answer to that question. I mean, how --**  
4 **that would be a violation if they do that, but.**  
5 **Q So once the report is sent through**  
6 **SIS, and that report contains all of the compounds**  
7 **that were requested to be analyzed, and that goes**  
8 **to the client, you don't know whether or not they**  
9 **could print one sheet of it or all five pages of**  
10 **that report?**  
11 **A That report says number of pages,**  
12 **so. If anybody's missing any pages, they**  
13 **should -- they probably would know. That's**  
14 **what I'm thinking.**  
15 **Q If they did alter that report in**  
16 **terms of taking off results of analytes that were**  
17 **found, that would be a violation of the NJ NELAP**  
18 **requirements, correct?**  
19 **A I don't know what NELAP**  
20 **requirements in that direction. All I know the**  
21 **requirements for analytical results needs to be**  
22 **reported in particular format and all that, but**  
23 **I don't remember what the requirement is for**  
24 **the clients.**  
25 **Q And if in a sample you were asked to**

167

1 analyze for a suite of metals, and let's say again  
2 there's 15 metals, and the lab only reported  
3 through the SIS system five of those, would that  
4 be a violation of the NJ NELAP reporting  
5 requirements?  
6 **A If the sample is logged for 15, we**  
7 **will report 15.**  
8 **Q I understand that, but I'm asking you**  
9 **the hypothetical question, if --**  
10 **A I cannot answer hypothetical**  
11 **questions answer. I can answer your question**  
12 **with the facts which I know. I cannot answer**  
13 **your hypothetical question. I'm sorry.**  
14 **Q Well, and that's what I'm proposing**  
15 **to you as to whether or not -- let me ask you this**  
16 **question.**  
17 **Have you ever known, during your time**  
18 **in employment with the DEP, where the lab, Bureau**  
19 **of Labs, has tested for a suite, again, using the**  
20 **example of metals, and that suite was for 15**  
21 **metals, and what was reported on the SIS system**  
22 **was only five? Have you ever heard of that**  
23 **happening?**  
24 **A If the other tests are cancelled**  
25 **for whatever reason, then we will not have**

168

1 **reported it. They would be reported as**  
2 **cancelled tests.**  
3 **Q Who would determine whether or not to**  
4 **cancel the portions of the test?**  
5 **A If sometimes we do not have the**  
6 **sample, we do not have enough sample to run, we**  
7 **may have to cancel the test. There are various**  
8 **reasons.**  
9 **Q Could the client tell you to cancel**  
10 **portions of that sample request?**  
11 **A I don't remember having -- I don't**  
12 **know.**  
13 **Q I mean, as a matter of procedure and**  
14 **how the lab operates, could your client call and**  
15 **say I want to cancel the samples for zinc and tin?**  
16 **A We analyze the samples whatever**  
17 **our client request. And that's up to them,**  
18 **what they want us to analyze. And we report**  
19 **what they want us to analyze it for. It's not**  
20 **our judgment. And we cannot say no, you cannot**  
21 **analyze for this or that.**  
22 **Q So once an analysis is made based**  
23 **upon the client's request and that information is**  
24 **put into the LIMS system, can the client call you**  
25 **and say I don't want you to report through the SIS**

169

1 system these five metals, but everything else is  
2 fine to report?  
3 **A If it is in the LIMS system, it**  
4 **will get uploaded to SIS.**  
5 **Q Can the client call to the lab and**  
6 **make the request, prior to the information going**  
7 **into the LIMS system, I only wanted these five**  
8 **metals, I don't want the other ten reported, and**  
9 **can that happen?**  
10 **A If samples are logged in LIMS,**  
11 **that will be uploaded to SIS.**  
12 **Q Right, I understand. I'm talking**  
13 **about before it gets loaded into LIMS.**  
14 **A Exactly, I'm saying, if the sample**  
15 **-- if the test is logged in LIMS, the test will**  
16 **go to SIS. We will not pick and choose to**  
17 **upload. It is automatic function.**  
18 **If we do not upload -- every test**  
19 **that's completed in LIMS gets uploaded at**  
20 **night. It's not chemist function to upload the**  
21 **data to SIS. It is set automatically. Once**  
22 **the sample is completed, the data goes to SIS.**  
23 **Q With the SIS, when you say that the**  
24 **sample is put into the LIMS system, does that mean**  
25 **that once you put in the sample identification**

43 (Pages 166 to 169)

170

1 number into the system, that everything that's  
2 requested to be tested for automatically will be  
3 uploaded to that?

4 **A** Once the data is entered and  
5 approved, then it will get uploaded to SIS.

6 **Q** So then --

7 **A** Not when it is logged.

8 **Q** So once the analysis happens and it's  
9 approved, that's when it gets uploaded?

10 **A** That's correct.

11 **Q** And depending upon what's requested  
12 to be analyzed for, that can happen at different  
13 times, correct? Depending on the holding time of  
14 the sample.

15 **A** Can you repeat that question?

16 **Q** Sure. So when the lab gets a sample  
17 and they're requested to sample for a variety of  
18 different components, that particular sample  
19 doesn't necessarily or isn't necessarily tested  
20 for each one of those components on the same day  
21 at the same time, correct?

22 **A** That's correct.

23 **Q** So when the sample is tested for  
24 what's requested, those samples that are uploaded,  
25 once finished and approved, could happen on

171

1 different times, different days.

2 **A** That's correct.

3 **Q** And so what then gets uploaded into  
4 LIMS, that system, is once all of those are  
5 completed, is that right? Or does it do it one at  
6 a time?

7 **A** For inorganic analysis, for  
8 metals, use the metals as an example, I will  
9 use metals as an example. So for, say, the  
10 metals test, for inorganic analysis, I should  
11 say, as the samples are completed on a daily  
12 basis and approved, those tests will be  
13 uploaded to SIS.

14 **Q** So it's one at a time.

15 **A** It can be one at a time.

16 **Q** So prior to them being uploaded as  
17 the analysis is finished, can a client call you  
18 and say this is a rush job, can you tell me what  
19 the results are before they're actually uploaded  
20 and printed?

21 **A** Once the samples are completed and  
22 uploaded to SIS, client can get to SIS and give  
23 you that data, that final report. They do not  
24 have the full final report because the samples  
25 are still under process.

172

1 However, so, like, suppose the  
2 metal analysis is completed, but other  
3 inorganic analysis is not completed, our client  
4 can see the metals data in SIS.

5 **Q** I see. So if one suite that's tested  
6 for, those -- all of the components of that  
7 particular suite of testing is finished, that can  
8 be uploaded to SIS, and they can look at it even  
9 though there's additional things that they asked  
10 to be analyzed for that aren't done yet?

11 **A** Correct. For inorganic analysis.

12 **Q** So with regard to that, it's possible  
13 for there to be more than one report for one  
14 sample, correct?

15 **A** No. Let me correct. They get the  
16 report, when they get the e-mail only when the  
17 sample is completed in SIS. They will not get  
18 the e-mail that sample is completed unless  
19 sample is completed in SIS.

20 What I meant -- what I said is,  
21 they can go to SIS and then they can view that  
22 these metals are done, and this is the final  
23 report for this particular metals. However,  
24 the sample, other inorganic tests are still not  
25 there. So partial results, they can see.

173

1 **Q** And so when they go in to look at  
2 SIS, and the reporting for the other analytes  
3 aren't finished yet, so it's just on SIS and  
4 they're viewing it, can they print from that  
5 screen what's been tested for so far?

6 **A** I don't know. I know they have  
7 access to that, that's all I know.

8 **Q** And so have you ever had a situation  
9 at your lab where a sample has been submitted to  
10 you and it is indicated that it's a rush?

11 **A** Yes.

12 **Q** And in the instance when you get a  
13 sample that's indicated that it's a rush, what  
14 procedure does that tip off in the lab?

15 **A** What it means, that we put --  
16 indicate the sample is a priority analysis.  
17 And we inform our staff member to put that in a  
18 first laboratory batch to analyze it instead of  
19 waiting, like, depending on the, of course, on  
20 the holding time, but depending on -- and so  
21 that that will be analyzed the very first  
22 laboratory batch so we can have our client have  
23 results in rush order, like, quickly.

24 **Q** Beside pushing it, for lack of a  
25 better term, pushing it to the front of the line

44 (Pages 170 to 173)



174

1 on a rush sample, does it also get rushed to be  
2 entered into the LIMS system and then SIS?  
3 **A Yes.**  
4 **Q** And so being that it's a rush, prior  
5 to the results being uploaded to the LIMS system,  
6 could a client call you and ask for a verbal  
7 report of what's being found as it's coming in?  
8 **A Yes, they can.**  
9 **Q** When a verbal report has been made,  
10 is there any documentation of that through the lab  
11 procedures that a telephone call was made and a  
12 verbal report was given?  
13 **A Verbal report is given when we --**  
14 **when a verbal report is given and the sample is**  
15 **not upload yet, we inform our client this is --**  
16 **these are preliminary results.**  
17 **Q** Is that documented anywhere, that  
18 verbal conversation that you have given  
19 preliminary results?  
20 **A I don't know about that answer.**  
21 **Q** So you don't know if that's  
22 documented on paper anywhere.  
23 **A I don't know.**  
24 **Q** When that preliminary result is given  
25 to the client, can the client at that point say,

175

1 okay, look, cancel the rest of it, I don't need  
2 anymore?  
3 **A I don't know. I don't recall**  
4 **anything like this happen.**  
5 **Q** Who would know that information,  
6 whether a verbal report is written down anywhere  
7 and whether a client can call and cancel when a  
8 preliminary report has been given? Do you know  
9 who at the Bureau of Labs would know that?  
10 **A I don't know that happens, so I**  
11 **can't answer that question.**  
12 **Q** But you do know that preliminary  
13 verbal reports have been given.  
14 **A In case of an emergency, where we**  
15 **have given verbal report for, as a preliminary**  
16 **results, when the sample is still under**  
17 **process, but they need to make some decisions**  
18 **in an emergency situation, not a rush job, but**  
19 **an emergency, then we have given preliminary**  
20 **results. But then we do follow up with the**  
21 **complete analysis and provide the complete**  
22 **results.**  
23 **Q** At the lab, the Bureau of Labs, are  
24 surrogates or reagents used at the lab?  
25 **A Yes.**

176

1 **Q** Are surrogates and reagents the same  
2 thing, or are they two different things under lab  
3 language?  
4 **A Surrogate is one type of reagent.**  
5 **Q** And what type of reagent is it?  
6 **A Surrogates are usually used in**  
7 **mostly organic analysis.**  
8 **Q** What is it used for?  
9 **A I don't remember right now. It's**  
10 **just depending on what metals they needed.**  
11 **It's a type of reagents they use, so they call**  
12 **surrogate analysis, surrogate reagents.**  
13 **Q** Are surrogates used to cause a  
14 chemical reaction to bring out another chemical?  
15 **A No.**  
16 **Q** Are there reagents that do that that  
17 are used at the lab?  
18 **A There are reagents that we use it**  
19 **for sample preparation.**  
20 **Q** Would those reagents be used for  
21 sample preparation pursuant to the method being  
22 used?  
23 **A That is correct.**  
24 **Q** Does the Bureau of Labs maintain a  
25 list of the standard surrogates or reagents that

177

1 are used at the labs?  
2 **A Yes.**  
3 **Q** And do they have to maintain that  
4 list pursuant to the NJ NELAP requirements?  
5 **A Yes. That's part of the reference**  
6 **method. All the reagents we use is all part of**  
7 **the reference method.**  
8 **Q** Do you know what reagents or  
9 surrogates are used at the Bureau of Labs?  
10 **A No. There are thousands.**  
11 **Q** There are thousands. Okay. And for  
12 particular samples, let's say for semi-volatiles  
13 and volatile organic compounds, do you know what  
14 surrogates or reagents are used specifically with  
15 those in that particular method?  
16 **A No.**  
17 **Q** When a sample is analyzed for VOCs  
18 and semi-volatile organic compounds, the method  
19 that's used in order to analyze them, within that  
20 method it tells you what surrogate or reagent to  
21 use, correct?  
22 **A That's correct.**  
23 **Q** And that's information that would be  
24 listed in your lab somewhere so the lab staff  
25 would know what to use, correct?

45 (Pages 174 to 177)

178

1 A That's correct.  
2 Q Have you ever had any instances where  
3 the lab has had a contamination where samples, all  
4 samples had to be voided as a result? For  
5 instance, like a spill of a reagent or something  
6 in the lab?  
7 A Not that I recall.  
8 Q In cleaning lab equipment, are  
9 reagents used in the lab to clean equipment?  
10 A Yes.  
11 Q Do you know what type of reagents are  
12 used standardly to clean lab equipment?  
13 A Different type of acids, solvents.  
14 Q Again, is there a standard list of  
15 reagents used to clean lab equipment?  
16 A Yes.  
17 Q And that also would be a list that  
18 the lab staff would have access to to know what  
19 they're supposed to clean equipment with and what  
20 they're not supposed to?  
21 A Yes.  
22 Q Is there a procedure that the Bureau  
23 of Labs follows pursuant to NJ NELAP for cleaning  
24 of lab equipment?  
25 A Bureau of Laboratories followed

179

1 the procedures, standard procedure, to clean up  
2 the lab equipment. If it is defined in the  
3 reference method, we follow that, otherwise we  
4 have our own procedure to use to clean up the  
5 equipments.  
6 Q In cleaning up lab equipment, are  
7 there, within those procedures, times built in for  
8 that equipment to dry if a reagent is being used  
9 to clean it to make sure there's no residues of  
10 that reagent?  
11 A If any reagents are used to clean  
12 up the lab equipment, like glassware, if any  
13 glassware is used, let's suppose nitric acid is  
14 used, then we also rinse it with distilled  
15 water or deionized water to make sure to remove  
16 that acid from the glassware.  
17 Q And the clean up procedures that you  
18 have in the Bureau of Labs, they're pretty  
19 strictly enforced, correct?  
20 A Yes.  
21 Q I mean, because the result of them  
22 not being strictly enforced is that they could  
23 contaminate samples, correct?  
24 A That's correct.  
25 Q And so if there were to be found at

180

1 the Bureau of Labs an issue with the way that  
2 glass, for instance, was being cleaned, how would  
3 that be addressed?  
4 A We can -- when we analyze samples,  
5 we have various quality control samples. One  
6 of the quality control sample we analyze with  
7 each batch of sample -- with batch of samples  
8 is reagent blank. That reagent blank is a QC  
9 that can indicate if there is any lab  
10 contamination.  
11 Q Is that reagent blank, is that, in  
12 cleaning the lab equipment, let's say glassware,  
13 is that logged and maintained anywhere, the  
14 results of that?  
15 A The results of reagent blank? Yes.  
16 Q And that is logged in the DEP Bureau  
17 of Labs' files for the cleaning process, correct?  
18 A It is -- reagent blank results are  
19 maintained as part of the QC, quality control  
20 sample.  
21 Q Again, that's done because if there's  
22 an allegation made that the glassware wasn't  
23 cleaned and contaminated a sample, you would be  
24 able to go back to it and say, nope, here's our  
25 reagent blank, everything was fine, is that right?

181

1 A That's the purpose of the reagent  
2 blank, to make sure there is no lab  
3 contamination.  
4 Q And that's something that the Bureau  
5 of Labs takes very seriously, correct?  
6 A Yes.  
7 Q Because if you have contamination at  
8 your lab, that's something that would necessarily  
9 or may, could affect your accreditation, correct?  
10 A That will affect our results,  
11 sample results, yes.  
12 Q So with every, let's say, use the  
13 glass as an example, glass container that is used  
14 to analyze a sample, there is a reagent blank that  
15 goes along with that, correct?  
16 A There is a reagent blank goes  
17 along with the batch of samples that we  
18 analyze.  
19 Q And so if there was a problem where  
20 there's suspected contamination as a result of a  
21 reagent and, let's say glassware, you would be  
22 able to pull that reagent blank for that  
23 particular sample set and say, no, there was no  
24 problem, our reagent blank shows there was no  
25 problem?

46 (Pages 178 to 181)

182

1 A We can -- we definitely review the  
2 reagent blank data to make sure there is no lab  
3 contamination.  
4 Q But what I'm getting at is, after the  
5 fact, after you have done that and you have  
6 reviewed it and you say, okay, there's no  
7 contamination, we can use these bottles to sample,  
8 if someone later would come back and say there was  
9 contamination of reagents from the lab glassware,  
10 you would be able to look at what sample they're  
11 alleging that happened in and pull that reagent  
12 blank sample to say, no, when we ran it, the blank  
13 sample said everything was fine, there was no  
14 contamination?  
15 A Any suspicion of the lab  
16 contamination, our standard procedure is to  
17 check our reagent blank data to make sure that  
18 there is no contamination from any of the  
19 reagent used in that particular analysis and  
20 just to confirm it.  
21 Q Have you ever received a call from  
22 the Oil & Gas Department inquiring as to whether  
23 or not a reagent may have contaminated a specific  
24 result that they were interested in?  
25 A Our reagents?

183

1 Q Yes.  
2 A Not that I know of.  
3 Q Who would be the person the client  
4 would contact if there was a suspected  
5 contamination?  
6 A They can contact anybody, section  
7 chief or -- they have numbers for anybody they  
8 can contact.  
9 (Analytical Report for Land  
10 Recycling and Waste Management marked as  
11 Exhibit Number 4.)  
12 BY MS. KENDRA SMITH:  
13 Q I'm going to show you what's being  
14 mark as Exhibit 4 to this deposition. Do you  
15 recognize that document?  
16 A Yes.  
17 Q What is this?  
18 A This is the fifth page of our  
19 analytical report. No, fourth page of analytical  
20 report.  
21 Q It indicates at the top it's Page 5  
22 of 4. Do you see that? At the top of the page.  
23 Would that be, like, a misprint? You can't have  
24 five pages of a four-page report, correct?  
25 A Yep. That's correct.

184

1 Q What is the purpose of this  
2 particular form? Or list.  
3 A These are the list of organic  
4 laboratory qualifiers that is indicated on our  
5 report when we report the results. These are  
6 the flags, the qualifiers that we use.  
7 Q So this is what you were talking  
8 about earlier about qualifiers.  
9 A This is for organic analysis. The  
10 qualifier I was talking about earlier about the  
11 sample preservation, that could be standard  
12 comment. That's what you call -- that's --  
13 those are not disqualifiers.  
14 This is a different code that is  
15 in LIMS which we use in order to add that to  
16 our final report.  
17 Suppose the sample is out of  
18 holding time, then there's a code in the LIMS  
19 that says sample was out of holding time. And  
20 that is not part of this code. These are only  
21 for organic analysis.  
22 Q The qualifiers that are in the LIMS  
23 system, is there a list of those like this one?  
24 A There's a list in our LIMS that  
25 they can use.

185

1 MS. KENDRA SMITH: We will make a  
2 formal request for that list of qualifiers from  
3 the LIMS system.  
4 BY MS. KENDRA SMITH:  
5 Q With regard to, you said the one,  
6 like with the holding time, that's one that's in  
7 the LIMS system and not listed on Exhibit 4. What  
8 about for the symbol less than, is that one that's  
9 in the LIMS system and not on this sheet?  
10 A Yes.  
11 Q And so let's go through these first.  
12 The U, as I understand the indication, and correct  
13 me if I'm wrong, means that you analyzed the  
14 sample as requested for a particular compound and  
15 it wasn't detected at all, is that right?  
16 A It was not detected at the  
17 detection limit.  
18 Q At the detection limit. And is,  
19 where it says the sample quantitation limit is  
20 reported, is that the detection limit?  
21 A That's correct, yes.  
22 Q So if you have a report that  
23 indicates, let's say, for chlorine, that there's a  
24 U next to the sample quantitation limit, does that  
25 mean that in the actual sample, the amount of the

47 (Pages 182 to 185)

<p style="text-align: right;">186</p> <p>1 chlorine in that sample was zero?</p> <p>2 <b>A That means the amount of chlorine</b></p> <p>3 <b>was less than whatever the detection limit is</b></p> <p>4 <b>indicated in that.</b></p> <p>5 <b>Q When you say that it was less than</b></p> <p>6 <b>the detection limit, does that mean that it was</b></p> <p>7 <b>less than what the actual instrument could detect?</b></p> <p>8 <b>A That means that amount of analyte</b></p> <p>9 <b>present is lower than the amount or quantitation</b></p> <p>10 <b>limit.</b></p> <p>11 <b>Q So I guess that's what I'm getting</b></p> <p>12 <b>at. If it's less than the quantitation limit,</b></p> <p>13 <b>does that mean it's a zero?</b></p> <p>14 <b>A That means that's the limit that</b></p> <p>15 <b>just printed on the report.</b></p> <p>16 <b>Q Does that mean that the lab got a</b></p> <p>17 <b>zero when they were testing?</b></p> <p>18 <b>A It got less than that quantitation</b></p> <p>19 <b>limit.</b></p> <p>20 <b>Q So when the data is being collected</b></p> <p>21 <b>and put into that LIMS system, is what's being</b></p> <p>22 <b>reported there is the person analyzing and</b></p> <p>23 <b>approving that seeing a quantitation limit next to</b></p> <p>24 <b>that chlorine, or are they seeing a number that's</b></p> <p>25 <b>less than the quantitation limit?</b></p>	<p style="text-align: right;">188</p> <p>1 <b>report it as an estimated value, a J value.</b></p> <p>2 <b>And we can say this is an estimated value.</b></p> <p>3 <b>Q And so who makes the determination as</b></p> <p>4 <b>to whether a sample will be listed on a final</b></p> <p>5 <b>report as a less than or a J? Who makes that</b></p> <p>6 <b>call? Is it the lab or the client?</b></p> <p>7 <b>A No, lab. Anything goes on the</b></p> <p>8 <b>report, it's our decision and our — and we</b></p> <p>9 <b>routinely report only U, which is — if it is</b></p> <p>10 <b>less than detection limit.</b></p> <p>11 <b>Q If I'm looking at U and J on this</b></p> <p>12 <b>Exhibit 4, I'm trying to appreciate the difference</b></p> <p>13 <b>between the two. Is there not a difference?</b></p> <p>14 <b>A There's a difference.</b></p> <p>15 <b>Q What's that difference?</b></p> <p>16 <b>A U is undetected at the detection</b></p> <p>17 <b>limit.</b></p> <p>18 <b>Q Okay.</b></p> <p>19 <b>A Or values less than the detection</b></p> <p>20 <b>limit. I mean, was not detect — the value is</b></p> <p>21 <b>less than the detection limit, that is U.</b></p> <p>22 <b>Q The value is less than the detection</b></p> <p>23 <b>limit.</b></p> <p>24 <b>A Yes. So it's not, basically it is</b></p> <p>25 <b>not detected. And J value is an MDL — I mean,</b></p>
<p style="text-align: right;">187</p> <p>1 <b>A Can you repeat that question,</b></p> <p>2 <b>please?</b></p> <p>3 <b>Q Sure. Can you read that back.</b></p> <p>4 <b>(Question read.)</b></p> <p>5 <b>A They are seeing the less than the</b></p> <p>6 <b>quantitation limit.</b></p> <p>7 <b>BY MS. KENDRA SMITH:</b></p> <p>8 <b>Q So they're actually seeing a</b></p> <p>9 <b>numerical value.</b></p> <p>10 <b>A That is correct.</b></p> <p>11 <b>Q But then it gets -- well, let me step</b></p> <p>12 <b>back a second. In the LIMS system, does it get</b></p> <p>13 <b>reported as less than the quantitation limit, or</b></p> <p>14 <b>does the actual numerical value go into that LIMS</b></p> <p>15 <b>system?</b></p> <p>16 <b>A Actual numerical value goes into</b></p> <p>17 <b>the LIMS system, but when it reports from LIMS</b></p> <p>18 <b>it takes less than the detection limit.</b></p> <p>19 <b>Q And if your client was looking at the</b></p> <p>20 <b>SIS system and wanted to know what the actual</b></p> <p>21 <b>numerical value for the chlorine, as we're using</b></p> <p>22 <b>as an example, was, could they call back to you or</b></p> <p>23 <b>to a division head and ask what that was?</b></p> <p>24 <b>A If we get a request us to report</b></p> <p>25 <b>it less than our detection limit, we could</b></p>	<p style="text-align: right;">189</p> <p>1 <b>estimate.</b></p> <p>2 <b>Q Okay. So the quantitation limit</b></p> <p>3 <b>that's listed here, that's the detection limit.</b></p> <p>4 <b>A That's the detection limit.</b></p> <p>5 <b>Q And the U is saying that the sample</b></p> <p>6 <b>is not detected at the detection limit, is that</b></p> <p>7 <b>right?</b></p> <p>8 <b>A That's correct.</b></p> <p>9 <b>Q And the J is saying that it's an</b></p> <p>10 <b>estimated value below the detection limit, but</b></p> <p>11 <b>above the method detection limit, correct?</b></p> <p>12 <b>A That's correct.</b></p> <p>13 <b>Q So, again, in trying to appreciate</b></p> <p>14 <b>the difference between the two, the method</b></p> <p>15 <b>detection limit that is there, what is that?</b></p> <p>16 <b>A Method detection limit is the —</b></p> <p>17 <b>it's the limit where we have 99 percent</b></p> <p>18 <b>confidence level, but it is not as reporting,</b></p> <p>19 <b>it's lower than the reporting limit or</b></p> <p>20 <b>quantitation limit.</b></p> <p>21 <b>So between MDL, which is method</b></p> <p>22 <b>detection limit, and the reporting limit,</b></p> <p>23 <b>whatever number is there, it's just an</b></p> <p>24 <b>estimate. It's not hundred percent confidence.</b></p> <p>25 <b>But it's there. It's not a hundred percent.</b></p>

190

1 **It's just for information, that's an estimate.**  
 2 Q Then towards the end, and so that I  
 3 understand this correctly, on Exhibit 4, the  
 4 document is labeled qualifiers, but in some of the  
 5 descriptions for the qualifiers listed here, they  
 6 refer to it as a flag. Same thing?  
 7 A **It's the same thing.**  
 8 Q And then we talked about the less  
 9 than symbol being one of the qualifiers that could  
 10 be used in the LIMS system that's not on this  
 11 sheet, correct?  
 12 A **Correct.**  
 13 Q And so when -- let's use chlorine  
 14 again as an example. If chlorine is reported as  
 15 less than three, what does that mean?  
 16 A **That means the quantitation limit**  
 17 **or detection limit for chlorine is three.**  
 18 Q So it's reporting that whatever was  
 19 found was less than the detection limit, correct?  
 20 A **That's true, yes.**  
 21 Q And so would that be the same as a U?  
 22 A **That is correct.**  
 23 Q Who makes the decision whether to use  
 24 the less than symbol or the U?  
 25 A **Organic data is reported with U,**

191

1 **and all inorganic material is reported with the**  
 2 **less than value.**  
 3 Q Why is that?  
 4 A **Just the system, that's the way**  
 5 **the system sets that up.**  
 6 Q And that's not something that can be  
 7 manipulated by the lab.  
 8 A **No.**  
 9 Q So going back to the U and J, it  
 10 indicates that the J is an estimated value below,  
 11 just to use the same terms, below the detection  
 12 limit, but above the method detection limit. But  
 13 the U is undetected at the detection limit.  
 14 A **That is correct.**  
 15 Q So could it also be a J? Could U and  
 16 J also be interchangeable?  
 17 A **At the detection limit, whatever**  
 18 **value is reported at detection limit, we are a**  
 19 **hundred percent confident that that's the**  
 20 **detection limit and we did not see or meet --**  
 21 **we did not see that compound at that level. So**  
 22 **that's a U.**  
 23 Q Okay.  
 24 A **So that's the difference. That's**  
 25 **why we have two codes.**

192

1 Q Yeah, because that's what I'm looking  
 2 at, and that's why I want to make sure because I  
 3 keep running this through my mind, and it's  
 4 getting late so maybe I'm just tired with it, but  
 5 the -- it says with the J, that the amount, the  
 6 estimated amount, is below the quantification  
 7 limit or detection limit.  
 8 A **But then there's a specific number**  
 9 **to that.**  
 10 Q There's an actual numerical --  
 11 A **Number.**  
 12 Q -- number. With the U --  
 13 A **You have only detection limit.**  
 14 Q But if we go back when it's inputted  
 15 into the LIMS system, there is a numerical number.  
 16 A **But that doesn't go to SIS.**  
 17 Q Got it. Okay. So that I have this  
 18 straight, with the U number when it's reported,  
 19 there is a numerical value for it, but it's --  
 20 A **For organic samples, I'm not a**  
 21 **hundred percent sure how it's reported, if it**  
 22 **is reported just U as a detect -- in LIMS.**  
 23 **For organic, even in LIMS, it is**  
 24 **only at the detection limit, it is reported.**  
 25 **If it is not -- if it is non-detected, it says**

193

1 **the reporting limit in LIMS.**  
 2 **For inorganic samples, analyst put**  
 3 **the actual number, and it gets reported as a**  
 4 **less than value in LIMS.**  
 5 Q So when it's a U, then there's --  
 6 it's a zero.  
 7 A **When it is U, it is not detected**  
 8 **at the detection limit.**  
 9 Q So there's no numerical value with it  
 10 that's corresponding.  
 11 A **Not that I know of. I don't know**  
 12 **exactly how that system is set up. I can just**  
 13 **say what it means. I don't know how it is set**  
 14 **up that there's numeric value or.**  
 15 Q So if we had, taking our example of  
 16 chlorine, if we had chlorine and it was .0001, and  
 17 let's say that that was less than the detection  
 18 limit, would it be reported in LIMS as 0001, or  
 19 would it --  
 20 A **No.**  
 21 Q -- be reported as a U?  
 22 A **It --**  
 23 Q Or a less than?  
 24 A **If it is inorganic parameters, it**  
 25 **will be reported as a less than value.**

<p style="text-align: right;">194</p> <p>1 Q Right.</p> <p>2 A If it is organic parameter, it</p> <p>3 will be reported as a U.</p> <p>4 Q So both of those, the less than and</p> <p>5 the U, have an actual numeric value to them. It's</p> <p>6 just the way --</p> <p>7 A As I said, I don't know how</p> <p>8 organic parameters are just reported as -- at a</p> <p>9 reporting level or actual number, I don't know</p> <p>10 that.</p> <p>11 Q Can you tell me, there's reference</p> <p>12 made in this document to an associated blank under</p> <p>13 the B flag. Can you tell me what an associated</p> <p>14 blank is?</p> <p>15 A Okay. Associated blank is the</p> <p>16 reagent blank that we -- I said we analyze with</p> <p>17 the batch of samples. So if -- that's what it</p> <p>18 means, reagent blank.</p> <p>19 Q So if there is a B next to a</p> <p>20 particular compound that was tested for, that's</p> <p>21 indicating that that compound was found in the</p> <p>22 reagent blank and now is also found in that</p> <p>23 sample, correct?</p> <p>24 A Correct.</p> <p>25 Q That would indicate that there might</p>	<p style="text-align: right;">196</p> <p>1 It says it identifies the average of multiple</p> <p>2 results from multiple analysis or the average of</p> <p>3 the averages of dual column analysis methods.</p> <p>4 When a sample -- let me ask this. In</p> <p>5 the Bureau of Labs, is there ever an instance</p> <p>6 where a sample gets rerun for the same compounds?</p> <p>7 A Oh, yes.</p> <p>8 Q And when a sample is rerun for the</p> <p>9 same compounds, under what circumstances does that</p> <p>10 happen?</p> <p>11 A There are several reasons that can</p> <p>12 happen. If the sample exceeds the calibration</p> <p>13 range, sometimes we have to make dilutions and</p> <p>14 we have to reanalyze it. Sometimes any QC</p> <p>15 failure, sometimes any instrument failure.</p> <p>16 There are many reasons that we may reanalyze</p> <p>17 the sample.</p> <p>18 Q If a sample for a particular analyte</p> <p>19 was reanalyzed, would it get a Q next to that on</p> <p>20 the final report?</p> <p>21 A No, it's not that reanalyzes. It</p> <p>22 doesn't say reanalyzes. It says the flag</p> <p>23 identifies the average of multiple results from</p> <p>24 multiple analyses.</p> <p>25 Q So that doesn't apply to reruns?</p>
<p style="text-align: right;">195</p> <p>1 be some contamination, is that right?</p> <p>2 A That's correct.</p> <p>3 Q But if that B doesn't show up, then</p> <p>4 you're safe to say that there wasn't any</p> <p>5 contamination by that reagent.</p> <p>6 A That's correct.</p> <p>7 Q In E, it indicates that this flag</p> <p>8 identifies compounds whose concentrations exceed</p> <p>9 the calibration range of the instrument for that</p> <p>10 specific analysis. What's meant by that?</p> <p>11 A That means it is outside the</p> <p>12 calibration range.</p> <p>13 Q The calibration --</p> <p>14 A The data.</p> <p>15 Q The calibration range of the actual</p> <p>16 machine?</p> <p>17 A The calibration range of the</p> <p>18 particular analyte. It exceeded the range.</p> <p>19 Q And so does that mean whatever is</p> <p>20 reported with that flag, that E flag, means that</p> <p>21 that amount was actually more than what's reported</p> <p>22 on the --</p> <p>23 A That's correct. It exceeded the</p> <p>24 range, yes.</p> <p>25 Q And then there's also a Q flag here.</p>	<p style="text-align: right;">197</p> <p>1 A No, it's not a rerun.</p> <p>2 Q Is there any identifier that's used</p> <p>3 in the LIMS system to identify when a rerun has</p> <p>4 been done of the same compounds?</p> <p>5 A Not that I know of.</p> <p>6 Q And if a rerun was done of the same</p> <p>7 compounds, that would show up in the QA/QC data</p> <p>8 packages, correct?</p> <p>9 A Yes.</p> <p>10 Q So if you wanted to know whether</p> <p>11 something was reruns, you would actually have to</p> <p>12 look back to the QA/QC data, it wouldn't be</p> <p>13 registered as a flag in LIMS or on this sheet,</p> <p>14 correct?</p> <p>15 A I don't believe so.</p> <p>16 Q When you have to rerun a sample, for</p> <p>17 instance, because the calibration range was</p> <p>18 exceeded, is that -- does that particular compound</p> <p>19 get that E symbol and then you'll see in the QA/QC</p> <p>20 data another run of it?</p> <p>21 A I don't believe so. I believe --</p> <p>22 let me look at this. Can you please repeat</p> <p>23 that question for me.</p> <p>24 (Question read.)</p> <p>25 A No, that's not true.</p>

<p style="text-align: right;">198</p> <p>1 BY MS. KENDRA SMITH:</p> <p>2 Q So when a sample is rerun for being</p> <p>3 out of the calibration limit, how is the rerun of</p> <p>4 that reported? Is the first run of it scratched</p> <p>5 out?</p> <p>6 A No, no, we keep all the data, but</p> <p>7 we, if it exceeds the calibration range, make</p> <p>8 the dilution, and then we get the data for the</p> <p>9 dilution, and then we report that data, which</p> <p>10 falls within the calibration range.</p> <p>11 Q So would the new sample that was in</p> <p>12 the calibration range be reported with that E, or</p> <p>13 the old number with the E next to it be reported?</p> <p>14 A I don't know when E flag is used.</p> <p>15 Because I don't have -- use this for a long</p> <p>16 time.</p> <p>17 Q But in any event, any time a sample</p> <p>18 is rerun, that data is not destroyed, it stays</p> <p>19 with that sample --</p> <p>20 A Yes.</p> <p>21 Q -- data package, the QA/QC data</p> <p>22 package?</p> <p>23 A Yes.</p> <p>24 Q Is there, for lack of a better term,</p> <p>25 a worksheet for a lab staff member to use to</p>	<p style="text-align: right;">200</p> <p>1 And I just wanted to ask you, with</p> <p>2 regard to QA/QC data, number one, what does QA and</p> <p>3 QC stand for?</p> <p>4 A Quality assurance and quality</p> <p>5 control.</p> <p>6 Q And what makes up a QA/QC data</p> <p>7 package like the ones I have in front of me here?</p> <p>8 A What you have in front of you is a</p> <p>9 sample analysis with the quality control</p> <p>10 samples analyzed along with the samples.</p> <p>11 Q And will the QA/QC part of that</p> <p>12 sample analysis always, will they always be</p> <p>13 together for a particular sample?</p> <p>14 A Yes.</p> <p>15 Q And is that done as a result of the</p> <p>16 procedures that need to be followed as per the</p> <p>17 accreditation by NJ NELAP?</p> <p>18 A Yes.</p> <p>19 Q And the quality analysis and quality</p> <p>20 control data, that also includes any testing that</p> <p>21 was done on the machines, the initial calibration</p> <p>22 of the machines, is that correct?</p> <p>23 A That's part of quality control.</p> <p>24 Q And what else is part of quality</p> <p>25 control other than testing the machinery to make</p>
<p style="text-align: right;">199</p> <p>1 indicate why they're rerunning a sample, what the</p> <p>2 dilution was that was used, anything where they</p> <p>3 handwrite it down?</p> <p>4 A I don't know. I don't know</p> <p>5 exactly what they do because there's so many</p> <p>6 procedures, so I don't know the answer to that.</p> <p>7 Q As with the reruns of the tests,</p> <p>8 would, for instance, if a panel of metals was</p> <p>9 requested to be analyzed for, would all of the</p> <p>10 numerical values for each one of those metals that</p> <p>11 were found also be recorded in the QA/QC data?</p> <p>12 A Yes.</p> <p>13 Q So even if it had, for instance, a</p> <p>14 less than value next to it or a U value next to</p> <p>15 it, the actual numeric number of what was found</p> <p>16 would be in the QA/QC data?</p> <p>17 A Yes.</p> <p>18 Q The qualifiers that are listed here,</p> <p>19 are these qualifiers universal for all labs in</p> <p>20 Pennsylvania?</p> <p>21 A I don't know.</p> <p>22 Q We talked a little bit about the</p> <p>23 QA/QC data packages. And counsel has been kind</p> <p>24 enough to give me some of those, and some of those</p> <p>25 (indicating).</p>	<p style="text-align: right;">201</p> <p>1 sure that's the right calibration, there's nothing</p> <p>2 wrong with it, what other things are part of the</p> <p>3 quality control?</p> <p>4 A They're batch quality control,</p> <p>5 batch QC.</p> <p>6 Q And what's batch QC?</p> <p>7 A It's reagent blank, as I said,</p> <p>8 reagent blank is analyzed. And there are other</p> <p>9 quality control samples, like laboratory 45</p> <p>10 matrix that is matrix spike samples.</p> <p>11 Q What's that meant to double-check?</p> <p>12 A If there is any interference with</p> <p>13 from the matrix itself, of the sample matrix,</p> <p>14 that's what it checks.</p> <p>15 Q Anything else that would be under</p> <p>16 quality --</p> <p>17 A Duplicate analysis.</p> <p>18 Q What's the duplicate analysis meant</p> <p>19 to check?</p> <p>20 A It just says that -- it proves the</p> <p>21 reproducibility of the results, reproducibility.</p> <p>22 Q And anything else under the quality</p> <p>23 control part?</p> <p>24 A There's so much. I don't remember</p> <p>25 right now. We do second source check. I don't</p>

<p style="text-align: right;">202</p> <p>1 know how -- what you call that, but --</p> <p>2 Q What's a second source check?</p> <p>3 A It's just, like, after calibration</p> <p>4 is done, for many analysis, we analyze a second</p> <p>5 source standard, which is not the same as the</p> <p>6 calibration standard, to make sure that there</p> <p>7 is no problem with our calibration standard.</p> <p>8 Q With this quality control data, all</p> <p>9 of these checks that you're doing, what is that</p> <p>10 meant to do? Why does the lab have to go through</p> <p>11 all that?</p> <p>12 A To assure that -- to make sure</p> <p>13 that sample analyzed, the results are accurate</p> <p>14 and quality results, we produce quality and</p> <p>15 accurate results, to make sure that instrument</p> <p>16 is functioning properly and the samples are</p> <p>17 prepared properly and reagents used, glassware</p> <p>18 used, all those things are done correctly.</p> <p>19 Q Then if there was a failure of one of</p> <p>20 those QC things during the process of an analysis,</p> <p>21 that would be noted on the final report, correct?</p> <p>22 A Yes, if there is any QC failure</p> <p>23 which we have to report along with the data,</p> <p>24 then we do qualify the data.</p> <p>25 Q Any QC failure at all, regardless of</p>	<p style="text-align: right;">204</p> <p>1 Q Sure. Would it list all of the</p> <p>2 numerical values of the metals that were requested</p> <p>3 to be sampled for, minus the less than's, the U's,</p> <p>4 all of the qualifiers?</p> <p>5 A That's correct, they will have</p> <p>6 numerical values with it.</p> <p>7 Q So if you wanted to see what a less</p> <p>8 than, what the actual numerical value was, you</p> <p>9 could go to the sample package with the QA/QC data</p> <p>10 and --</p> <p>11 A That is correct.</p> <p>12 Q And that would also be true of the U</p> <p>13 indication?</p> <p>14 A I'm not sure about that.</p> <p>15 Q And that would also be true of the J,</p> <p>16 it would just show the numerical value without the</p> <p>17 J next to it?</p> <p>18 A What is -- for -- can you repeat</p> <p>19 that.</p> <p>20 Q For the qualifier J, in the sample</p> <p>21 package with the QA/QC data, if I wanted to see</p> <p>22 just what the numerical value was without the J</p> <p>23 next to it, that would be in here as well?</p> <p>24 A That is correct.</p> <p>25 Q So this QA/QC data package with all</p>
<p style="text-align: right;">203</p> <p>1 whether it has to be reported or not, that would</p> <p>2 be in the QA/QC data package?</p> <p>3 A You should be able to see it.</p> <p>4 Q And then the quality assurance part,</p> <p>5 what all is included in that?</p> <p>6 A All quality control sample must</p> <p>7 meet our acceptance criteria. That is quality</p> <p>8 assurance, that we assure that the data we</p> <p>9 produce is a quality data.</p> <p>10 And so for any QC redone, we have</p> <p>11 acceptance criteria for that too. It has to</p> <p>12 meet our acceptance criteria in order to verify</p> <p>13 that they did pass or fail.</p> <p>14 Q So there's another set of internal</p> <p>15 checks, so to speak, to make sure that everything</p> <p>16 is done properly?</p> <p>17 A That's correct.</p> <p>18 Q With the QA/QC data, if, again let's</p> <p>19 use the metals as an example, if a sample was sent</p> <p>20 and the client wanted a metal -- it analyzed for</p> <p>21 metals, in this sample analysis package, including</p> <p>22 the QA/QC data, would that list all of those</p> <p>23 numerical values for all the metals tested that</p> <p>24 were requested by the client?</p> <p>25 A Can you repeat that question.</p>	<p style="text-align: right;">205</p> <p>1 this information is pretty important, correct?</p> <p>2 A Yes.</p> <p>3 Q And for lack of a better analogy, and</p> <p>4 correct me if you don't agree with it, but the</p> <p>5 QA/QC data is maybe akin to when you were in</p> <p>6 school and they said show me your math work where</p> <p>7 you'd write out each step and how you got to the</p> <p>8 answer, would that adequately describe what's in</p> <p>9 here?</p> <p>10 A This quality control package shows</p> <p>11 you how we calibrate the instrument, what</p> <p>12 quality control sample we analyze with each</p> <p>13 batch along with the results, and then you will</p> <p>14 get the data for each unknown sample as well.</p> <p>15 Q Within, let's take VOCs as an</p> <p>16 example, within this data package with the quality</p> <p>17 control, would it list what surrogates or reagents</p> <p>18 were used in analyzing for VOC's in a particular</p> <p>19 sample?</p> <p>20 A Yes.</p> <p>21 Q So you would be able to tell from</p> <p>22 this QA/QC package exactly what reagent or</p> <p>23 surrogate was used in a particular sample?</p> <p>24 A You can see the surrogates, not</p> <p>25 all the reagents. The reagents are used for</p>



206

1 preparation. So they are not analyzed with the  
2 sample. You analyze the samples for analytes  
3 requested. But surrogate is one type of  
4 reagent. But you can list the surrogate. They  
5 list the surrogate for VOC.  
6 Q And so the reagents with regard to,  
7 let's take cleaning the glass, that's kept in a  
8 separate data file? The reagent blank where you  
9 go through --  
10 A You're asking me the reagent blank  
11 data?  
12 Q Yes. Is that separate than --  
13 A No, reagent blank data is with  
14 this part (indicating).  
15 Q And so with the example of the  
16 glassware and doing a check to make sure that that  
17 glassware is not contaminated after it was cleaned  
18 and all of that, where would that information be?  
19 A The information that you're  
20 looking for is a reagent blank that we don't --  
21 and that is always with the part of the data  
22 package.  
23 Q So that reagent blank will tell you  
24 whether or not there's any reagent or surrogate  
25 contamination of that sample?

208

1 there was an issue?  
2 A If the reagent blank does not meet  
3 our acceptance criteria, that will be flagged  
4 as a B in our report.  
5 Q The report that comes out of the SIS  
6 system, is that report, in terms of its form, the  
7 same every time?  
8 I mean, obviously the compounds  
9 tested for will change and those numbers will  
10 change, but the formatting of that report itself,  
11 is it the same every time, you use the same form,  
12 for lack of a better word?  
13 A It's a standard format.  
14 Information up there is a standard format.  
15 Q At the Bureau of Labs, are there  
16 different levels of reports that can be issued?  
17 Like a Level 1, Level 2, Level 3, Level 4?  
18 A No. Not that I know of.  
19 Q Are you aware that at some  
20 laboratories in particular, environmental  
21 laboratories in the state of Pennsylvania, they  
22 have various levels of reporting depending upon if  
23 they're doing work for Superfund cleanup sites,  
24 that sort of thing?  
25 A I don't know.

207

1 A Surrogate is not a reagent that  
2 you use for preparation. Sample prep -- is  
3 used in a sample preparation, but. . . Can you  
4 repeat that question? I'm getting tired now.  
5 I'm really tired now. Don't remember any of  
6 this.  
7 Q So the surrogate information,  
8 whatever surrogates are used, like our example  
9 with the VOCs in analyzing for them, that  
10 information is contained in the data package with  
11 the QA/QC data, correct?  
12 A Yes.  
13 Q And the reagent used to clean  
14 glassware and the checks that are used to make  
15 sure that that glassware is not contaminated with  
16 any reagent, would that also be found in the QA/QC  
17 data?  
18 A No.  
19 Q Where would that be found?  
20 A There are no specific checks for  
21 each and every glassware that we clean. The  
22 check is reagent blank QC that we run.  
23 Q And that is in here.  
24 A That is in there.  
25 Q And again, that would be noted, if

209

1 Q So at the DEP, there's only this one  
2 form of reporting?  
3 A I think so, yes.  
4 Q With regard to the analysis that the  
5 DEP Bureau of Labs does, specifically for arsenic,  
6 is that analysis speciated?  
7 A I don't think so.  
8 Q And for specifically chromium that  
9 the Bureau of Labs tests for, is that speciated at  
10 all into the different types?  
11 A No.  
12 Q And so you're, just for arsenic and  
13 for chromium, you're getting a total read.  
14 A That's correct.  
15 Q Within your lab, when you said about  
16 the Chemist 1, Chemist 2, Chemist 3, Chemist 4, do  
17 you know whether or not there are any specific  
18 educational requirements to hold those positions  
19 within the Bureau of Labs for the DEP?  
20 A I don't know, I mean, detail, but  
21 they need to have a degree in chemistry, that's  
22 for sure, certain credits in chemistry.  
23 Q Does it need to be a four-year  
24 college degree, do you know?  
25 A That's correct.

210

1 Q With regard to any methane, ethane,  
2 propane, ethene testing that the Bureau of Labs  
3 does for the DEP, are there, within your  
4 laboratory, levels at which methane, if found,  
5 need to be reported either to the client or to a  
6 public water source, like an MCL violation?

7 A It's just a routine analysis. We  
8 follow the same procedure for any analysis  
9 irrespective of what analysis. If it's a  
10 requirement, we follow those requirements.

11 Q Do you know whether or not, in the  
12 Bureau of Labs, if methane is detected in a sample  
13 above a particular level, that that has to be  
14 reported either to the client or to the public  
15 water source?

16 A We report all our results to our  
17 client. That's what they request the sample  
18 analysis, we report the results. That's a  
19 normal process.

20 Q Are you familiar with action levels  
21 for methane in water?

22 A No.

23 Q Do you know whether or not any of the  
24 Bureau of Labs' chemists are trained in the mine  
25 safety regulations for methane in confined spaces?

211

1 A No.

2 Q So unlike an MCL violation where if  
3 you get a detection that's above an MCL and you  
4 have to report that to the client to a public  
5 water source, there's nothing equivalent to that  
6 for methane at the Bureau of Labs, is that  
7 correct?

8 A Methane analysis is just a routine  
9 analysis. We receive the sample, we analyze  
10 it, we report it.

11 Q And that's what I'm trying to  
12 understand. Does that extra step you need to go,  
13 like you have to with an MCL violation, if it's  
14 above a certain level?

15 A No.

16 Q I'm handing you what's being marked  
17 as Exhibit 5 to the deposition.

18 MS. KENDRA SMITH: I made you guys CD  
19 copies just because it would be easier, so I  
20 figured you wouldn't want to carry paper.

21 (QA/QC data package marked as Exhibit  
22 Number 5.)

23 A Can I take two minutes' break.

24 MS. KENDRA SMITH: Sure.

25 (Brief recess.)

212

1 BY MS. KENDRA SMITH:

2 Q I hand you what's marked as Exhibit 5  
3 to the deposition. If you can just take a brief  
4 look at it.

5 I take DEP at its word since that  
6 cover letter is from an attorney from DEP that  
7 that is the QA/QC data package regarding Mr.  
8 Kiskadden, who is the Appellant in this case.

9 Did you want to flip through that  
10 just to see whether that looks like a QA/QC data  
11 package to you. Does that look like a QA/QC data  
12 package?

13 A Yes.

14 Q Prior to today, have you seen that  
15 before?

16 A This particular package?

17 Q Yes.

18 A No.

19 MS. KENDRA SMITH: What I have  
20 done and I said off the record, Rick, that I  
21 have provided this to her to look through  
22 because it's the complete one.

23 And what I have done is just taken  
24 pages from there to do as exhibits. So she can  
25 feel free, the DEP number is at the bottom, she

213

1 can feel free to flip to it or use the next  
2 exhibit that I give her, okay? Just for her to  
3 try and keep stuff straight, make it a little  
4 easier.

5 BY MS. KENDRA SMITH:

6 Q I'm going to hand you what's been  
7 marked as Exhibit 6 to this deposition.

8 (Sample Submission Sheet marked as  
9 Exhibit Number 6.)

10 MS. MEGAN SMITH: I'm sorry, which  
11 Exhibit Number are we on?

12 MS. KENDRA SMITH: This is 6.

13 MR. JOHN SMITH: What she said is 6  
14 is actually in 5, right?

15 MS. KENDRA SMITH: Yes. All the  
16 remaining exhibits are in that QA/QC data pack. I  
17 just pulled them out to make it easier, because  
18 you guys have CDs, and.

19 BY MS. KENDRA SMITH:

20 Q Exhibit 6, do you recognize this  
21 document?

22 A This is sample submission sheet.

23 Q And this is a sample submission sheet  
24 for water, correct?

25 A Just checking.

214

1 Q Okay.  
2 A It doesn't say anything in water,  
3 so I'm --  
4 Q Is there anything identifying on  
5 there that you could tell that it's a water  
6 sample?  
7 A No.  
8 Q On this particular sample, you would  
9 agree, would you not, that there was one  
10 unpreserved bottle and one preserved bottle to be  
11 tested for metals that were submitted per this  
12 sample submission sheet?  
13 A That is correct.  
14 Q And that the cost center code that's  
15 listed as 288, that that would reference lab  
16 samples from Marcellus shale drilling?  
17 A I don't know.  
18 Q Can I -- I'm going to show you this,  
19 I'm not going to introduce this as an exhibit and  
20 I'm sure you are familiar with it, but just to  
21 refresh your memory.  
22 MR. JOHN SMITH: Can you identify  
23 this document?  
24 MS. MEGAN SMITH: What is that?  
25 BY MS. KENDRA SMITH:

215

1 Q This the Bureau of Laboratory  
2 Sampling Protocol Training Manual.  
3 A Okay.  
4 Q 288. And is 288 on the cost center  
5 control code?  
6 A Yes.  
7 Q And so that references the  
8 description for it is the lab samples from  
9 Marcellus shale drilling, correct?  
10 A Okay.  
11 Q The business unit that's referenced  
12 here as well is the Oil & Gas department. And  
13 just for the record, this is Page 9 of this Bureau  
14 of Laboratory sampling protocol that we're  
15 referencing here.  
16 MR. WATLING: It appears to be more  
17 than nine pages. Is this an exhibit or  
18 attachment?  
19 MS. KENDRA SMITH: This is the manual  
20 as I know it. Unless you know differently.  
21 MR. JOHN SMITH: It looks like there  
22 might be some Power Points before it.  
23 MS. KENDRA SMITH: It's all the  
24 training stuff.  
25 MR. JOHN SMITH: Megan, do you want

216

1 to come around?  
2 MS. MEGAN SMITH: I understand why  
3 you don't want to attach it to the record, but I'm  
4 having trouble with the fact that we're not going  
5 to be able to reference this later. And I don't  
6 have a copy of this, so I don't know --  
7 MS. KENDRA SMITH: I just did it to  
8 refresh her memory, that's all. It's got nothing  
9 else of interest to me.  
10 MR. WATLING: Why don't we -- you can  
11 state the title for the record, the title of this  
12 and then page numbers.  
13 MR. JOHN SMITH: We can even send it  
14 to you guys tomorrow, fax it or something if you  
15 want it.  
16 BY MS. KENDRA SMITH:  
17 Q So this is, you would agree, would  
18 you not, this is the Bureau of Laboratories  
19 Sampling Protocol Training, I read that correctly?  
20 A Yes.  
21 Q And that's the DEP's manual, correct?  
22 A That is correct.  
23 Q And this particular copy is dated  
24 January 2011, okay? And the reason why I was  
25 showing you this was to show you, because you had

217

1 said that with the cost center codes, the program  
2 codes, you weren't -- didn't remember completely  
3 what all those corresponded with?  
4 A Yeah.  
5 Q And that's the only reason why I'm  
6 showing them to you, but at the request of DEP  
7 counsel, one of -- the first page that we're  
8 looking at is cost center codes, and it starts at  
9 Page 1.  
10 And what I'm showing you here, what I  
11 would like you to look at, is the Page 9 of that,  
12 which is actually the ninth page of the cost  
13 center codes.  
14 And 288 is indicated as Marcellus,  
15 and then lab samples from Marcellus Shale  
16 Drilling, Oil & Gas Management. Is that correct,  
17 did I read that right?  
18 A Yes.  
19 Q So on Exhibit Number 6, the cost  
20 center code 288, that's what it's referring to,  
21 this is Marcellus Shale Drilling Oil & Gas  
22 Management, and Marcellus. Is that correct?  
23 A That's correct.  
24 Q And then the program code that's  
25 listed here, in this same document --

55 (Pages 214 to 217)

218

1 A Is Oil & Gas.  
2 Q You know the zero --  
3 A I mean, we have programs. Those  
4 are DEP programs. So whenever the program  
5 submits samples, they have to write the program  
6 code.  
7 Q Oh, okay. So when you look at this  
8 sample submission sheet, you can tell from the  
9 codes that are listed here that it's Marcellus  
10 shale drilling and that it's from the Oil & Gas  
11 Management section?  
12 A If you want to, yes, we can get  
13 that information.  
14 Q On this particular Exhibit Number 6,  
15 it indicates that the suite code is 942. Do you  
16 see that?  
17 A Yes.  
18 Q And what does that mean? What does  
19 942 mean?  
20 A 942 is the SAC code created at the  
21 request of our client. Any program, I mean,  
22 I'm just giving you 942 is a type of SAC code.  
23 When any program would like to  
24 collect samples for particular analysis on a  
25 routine basis, we prefer them to request our

219

1 standard analysis code so that it would be  
2 easier for us to log the sample using that  
3 code.  
4 And then the program can say, oh,  
5 they can select -- and they submit the request,  
6 and they can say what the project is, what they  
7 want to -- the SAC code.  
8 So they can identify, they can  
9 share that with their program people who are  
10 collecting samples.  
11 It has nothing to do with us,  
12 Bureau of Labs. We just complete the request  
13 once we receive that form, completed form.  
14 Q So this 942 code is a customized code  
15 for the Oil & Gas Management?  
16 A If it is -- it's -- that's what it  
17 says, yes.  
18 Q And so that was a conglomerate of  
19 different compounds that they wished, the Oil &  
20 Gas Department, wanted the lab to test for,  
21 correct?  
22 A Correct, yes.  
23 Q And then in addition to this 942  
24 code, they listed that they also wanted analysis  
25 for aluminum, sulfates and arsenic, correct?

220

1 A Yes.  
2 Q And this was submitted by Bryon  
3 Miller. Do you know Mr. Miller?  
4 A I don't know him.  
5 Q It was submitted to Mr. Miller on  
6 6-6-11 at 11 a.m., is that correct?  
7 A Yes.  
8 Q And it was received by the lab on  
9 June 7th, 2011, correct?  
10 A That's correct.  
11 Q But there's no time set in there,  
12 right?  
13 A No.  
14 Q So we don't know what time that it  
15 actually got to the lab.  
16 A No.  
17 Q And is that standard that there won't  
18 be a time?  
19 A Yes, that's standard.  
20 Q Is there any particular reason why  
21 they don't note the time that it was received?  
22 A No, it depends on the courier that  
23 delivers the coolers and so it's not required  
24 to.  
25 Q On this sample submission sheet,

221

1 there's no facility name, address, city or  
2 sampling location, correct?  
3 A That is correct.  
4 Q And there's no notation here for you  
5 to see or indicated anywhere here, and correct me  
6 if I'm wrong, that this is a public water  
7 facility?  
8 A That's correct, there's no  
9 indication.  
10 Q And if it was, it would be under that  
11 additional information section?  
12 A That's correct.  
13 Q That seven-digit number.  
14 A That's correct.  
15 Q He indicates here that the two  
16 bottles that were sent, one unpreserved and one  
17 preserved, he wanted tested specifically for  
18 metals, correct?  
19 A That one bottle that was submitted  
20 for metal analysis, yes, he wanted to do  
21 analysis for metals.  
22 Q The other unpreserved one would be  
23 tested for that 942?  
24 A 942 also includes metal analysis,  
25 but it also includes other parameters which

222

1 **require an unpreserved bottle.**  
 2 Q So based on what's requested here,  
 3 did Mr. Miller submit to the lab enough bottles to  
 4 do the testing that was requested?  
 5 A Yes.  
 6 Q And he indicates with the metals in  
 7 the preserved bottle that it was NHO3, that is the  
 8 nitrogen oxide?  
 9 A Nitric acid.  
 10 Q Nitric acid. And that's the proper  
 11 preservation for the metal?  
 12 A Yes.  
 13 Q On this particular sample, I notice  
 14 that there's no legal seals that were put on this  
 15 bottle, correct?  
 16 A Correct.  
 17 Q And the lab person who received the  
 18 sample initials A.M., she indicated that the  
 19 temperature was less than the six degrees celsius,  
 20 is that correct?  
 21 A That's correct.  
 22 Q And is that something that would have  
 23 been required based on what was being asked to be  
 24 sampled, the metals and the 942 suite?  
 25 A That's correct.

224

1 A Yes.  
 2 Q Here you know the address of where  
 3 the sample is taken, correct?  
 4 A Yes.  
 5 Q And it also indicates that this is  
 6 drinking water, correct?  
 7 A Yes.  
 8 Q Under non-potable water where it's  
 9 marked total coliform and fecal coliform, is that  
 10 what he's requesting by way of this sample  
 11 submission sheet to be tested for?  
 12 A Because he marked drinking water,  
 13 that's what it was -- yes, that's what it was  
 14 analyzed for.  
 15 Q What is the difference between total  
 16 coliform and fecal coliform?  
 17 A I don't remember. I don't analyze  
 18 those samples.  
 19 Q Do you know, if you have a sample  
 20 like this drinking water that comes back with a  
 21 total coliform that's greater than 200 per the 100  
 22 mL, but has the fecal coliform or E. coli at zero,  
 23 what the thing is that is contaminating the water?  
 24 A I don't know the details.  
 25 Q If we look at Exhibit 6 and 7 next to

223

1 Q This particular sample that was  
 2 collected by Bryon Miller, we know it was Bryon  
 3 Miller because of his name, but also because of  
 4 his collector ID number, those two should  
 5 correspond, correct?  
 6 A Yes.  
 7 Q Then we also know that this sample,  
 8 when it got to the lab, was given the lab  
 9 identification number of 015947, correct?  
 10 A That's correct.  
 11 Q And that particular number will be  
 12 used through all the lab analysis, this 15947, to  
 13 reference this particular sample, correct?  
 14 A That's correct.  
 15 Q I'm handing you what's being marked  
 16 as Exhibit 7.  
 17 (Microbiology Sample Submission Sheet  
 18 for PA DEP marked as Exhibit Number 7.)  
 19 BY MS. KENDRA SMITH:  
 20 Q Do you recognize this?  
 21 A Yes, this is sample submission  
 22 forms for microbiology analysis.  
 23 Q And this particular sample is a  
 24 little bit different than Exhibit 6, the sample  
 25 submission sheet?

225

1 each other, it looks like these samples were  
 2 collected at the same time, correct?  
 3 A That's correct.  
 4 Q It also indicates, if we look at both  
 5 samples, that the sequence number is the same.  
 6 A Correct.  
 7 Q And would that be appropriate to do,  
 8 if you took two samples at once, that that  
 9 sequence number would be the same?  
 10 A Yes, they're supposed to be the  
 11 same. It's the same sample. They won't  
 12 analyze for two different parameters.  
 13 Q This Exhibit 7 also references the  
 14 same cost code and same program code as Exhibit 6,  
 15 correct?  
 16 A Yes.  
 17 Q Can you tell from these documents,  
 18 were these two samples delivered to your lab at  
 19 the same time?  
 20 A Yes, they all come in the same --  
 21 same time.  
 22 Q And how is it that you're able to  
 23 identify they're at the same time?  
 24 A We receive the microbiology sample  
 25 at the same time we receive the inorganic

226

1 sample.  
2 Q In the same pack together?  
3 A Packed together in the same  
4 cooler.  
5 Q I'm going to hand you what's being  
6 marked as Exhibit 8 to this deposition.  
7 (Analytical Report for Land Recycling  
8 & Waste Management marked as Exhibit Number 8.)  
9 BY MS. KENDRA SMITH:  
10 Q Do you recognize this document?  
11 A Yes.  
12 Q What is it?  
13 A This is an SIS report.  
14 Q If you turn to the third page of this  
15 document, is that your name at the bottom?  
16 A Yes.  
17 Q And what does it mean to have your  
18 name at the bottom of this SIS report?  
19 A That means that it's a NELAP  
20 requirement, that it has, the report has to  
21 have designated person's name on it so that all  
22 reports have my name on it.  
23 Q And by having your name on it, are  
24 you certifying to NJ NELAP that the results of  
25 this are as it says here, the results presented on

227

1 this laboratory report meet all the requirements  
2 of The NELAC Institute, TNI, except if they are  
3 otherwise noted?  
4 A Correct.  
5 Q With regard to this report, you said  
6 that this is created through the SIS system, in  
7 here it identifies here the name of the individual  
8 where this water report was taken from. How did  
9 the lab get that information?  
10 A The lab did not put that  
11 information in SIS. Our client collectors,  
12 they have access to SIS just to put the headers  
13 information, that's what we call headers.  
14 And they're supposed to enter the  
15 collector ID number, sequence number, date and  
16 time of collection. And they can put all this  
17 header information which is reported here.  
18 That's not the lab.  
19 When data gets uploaded from LIMS  
20 to SIS, it looks for that collector ID number,  
21 sequence number, date of collection and  
22 sequence number in SIS, which our client has  
23 entered after collecting and submitting the  
24 samples. And it matches with that and it  
25 uploads the data.

228

1 Q With the SIS system, does the sample  
2 collector have to know what lab number has been  
3 assigned in order to make that connection happen?  
4 A No. The connection is only the  
5 collector ID number, sample ID number. That is  
6 the collector number and the sequence number.  
7 It has nothing to do with the lab ID number.  
8 Q And so because both Exhibit 6 and 7  
9 have the same collector ID number and sequence  
10 number --  
11 A And the time and date of  
12 collection is the same.  
13 Q And the time and date, all that is  
14 the same, all of this that was requested should be  
15 on here (indicating)?  
16 A It should have uploaded to SIS.  
17 Q So one of the reasons why I asked  
18 that question, and feel free to take a look  
19 through it, I don't see anywhere here where the  
20 microbiology sample is reported. Am I missing  
21 that?  
22 A This report is for lab ID number  
23 for inorganic analysis. So if -- I don't know  
24 why it is not there. If they have used this  
25 number, they should have --

229

1 Q That's why I was asking whether the  
2 collector would know the lab ID number that was  
3 assigned because there's different lab ID  
4 numbers --  
5 A Yes.  
6 Q -- for these two, but --  
7 A If the report is written using  
8 this number in the collection, they should have  
9 the microbiology details (indicating). I don't  
10 know how this is created (indicating).  
11 Q And so the microbiology data is not  
12 on this report, correct?  
13 A Let me just check. No.  
14 Q And then at the top of the page it  
15 indicates that this is an Analytical Report For  
16 Land Recycling & Waste Management. Is that  
17 something that the lab would have put in, or the  
18 client would have put in?  
19 A It definitely not lab put that.  
20 I'm not sure how it generates there.  
21 Q And do you know whether or not the  
22 SIS system pays any attention to that because the  
23 program number that was put in here is Oil & Gas,  
24 not Land Recycling & Waste Management?  
25 A See, that's what I said, I don't

230

1 know about that.  
2 Q So the analytical report, based on  
3 the sample submission sheets that were done for  
4 this particular report, were actually done for  
5 purposes of Oil & Gas, not Land Recycling & Waste  
6 Management, correct? According to the coding  
7 that's on both of these.  
8 A Yes.  
9 Q If the coding on both of these is Oil  
10 & Gas Management, but the actual report says Land  
11 Recycling & Waste Management, who gets the SIS?  
12 Is it Land Recycling & Waste Management, or Oil &  
13 Gas?  
14 A Who gets the SIS?  
15 Q Yes, who gets that e-mail.  
16 A Oh, the collector gets the e-mail.  
17 The Number 1611.  
18 Q So it would go directly to Bryon  
19 Miller.  
20 A Correct.  
21 Q The SIS, when it sends that e-mail,  
22 is looking only at the collector ID number to  
23 identify the person to send it to?  
24 A Um-hmm. Yes.  
25 Q So if this report is sent anywhere

231

1 else, Mr. Miller is the one that has to do it, is  
2 that right?  
3 MR. WATLING: Could you rephrase the  
4 question, if this?  
5 A Could you rephrase the question?  
6 BY MS. KENDRA SMITH:  
7 Q Is there something you didn't  
8 understand?  
9 A Can you re -- yeah, I don't --  
10 Q You don't understand, okay. If this  
11 is sent to Mr. Miller through the SIS system, if  
12 it is given to anyone else, it has to be  
13 Mr. Miller who is giving it to them, correct?  
14 A To my knowledge, SIS sends the  
15 reports to the collector number, which is  
16 identified, they have the e-mail address, and  
17 that report goes to the collector.  
18 Q Okay.  
19 A To my knowledge.  
20 Q Okay. So to your knowledge the SIS  
21 system is not going to send this report to anyone  
22 else because this is the only collector ID?  
23 A SIS would send the reports only  
24 those e-mails which is in SIS officially,  
25 otherwise it will not go to -- it will not send

232

1 it to somebody else.  
2 Q And so specifically for this test,  
3 because he's identified as the collector ID  
4 number, it went, to the best of your knowledge --  
5 A To the best of my knowledge it  
6 went to collector.  
7 Q Because this isn't a public water  
8 source, the lab didn't send it out to anyone else,  
9 correct?  
10 A This is -- yeah, this is  
11 non-public source, that's correct.  
12 Q Then the first page of this report at  
13 the bottom kind of in the middle there it says the  
14 laboratory sample ID number, I2011 01 5947,  
15 correct? Did I read that right?  
16 A That's correct.  
17 Q And that corresponds with the lab  
18 number on Exhibit 6, correct?  
19 A That's correct.  
20 Q And the 942 standard analysis is also  
21 what is reported on Exhibit Number 6.  
22 A That's correct.  
23 Q With regard to that 942 suite to test  
24 for, you had indicated that it included metals,  
25 and whatever else is included in there, I took

233

1 that to mean that you didn't recall specifically  
2 what that 942 suite test for, is that right?  
3 A That's correct.  
4 Q So whatever that 942 suite tested  
5 for, those results are in this report, correct?  
6 A Yes.  
7 Q In looking through this report, do  
8 any of these results look like, to you, that they  
9 exceed SMCL?  
10 A I don't know.  
11 Q Would you have to look at the  
12 printout of what the SMCL's are and what levels?  
13 A Yes.  
14 Q Do you know offhand, looking at the  
15 things that were tested for, what the particular  
16 levels, in looking at it, particular levels of any  
17 of these compounds look abnormally high to you?  
18 A I don't know. I don't look at the  
19 reports every day, so.  
20 Q And in your life as a Chemist 1,  
21 Chemist 2, Chemist 3, Chemist 4 --  
22 A Long time back.  
23 Q -- would this be something that you  
24 were familiar with looking at on a daily basis?  
25 A Yeah.

59 (Pages 230 to 233)

<p style="text-align: right;">234</p> <p>1 Q And during that period of time, did 2 you become familiar with what might look like it's 3 not normal for drinking water in terms of any of 4 these constituents as being high? 5 A <b>If it is a public drinking water 6 and if it is an EPA requirement, I would have 7 known. Otherwise not.</b> 8 Q Do you have any idea what the DEP's 9 recommended level for sodium in water is? 10 A <b>I don't know.</b> 11 Q In looking at this test on Page 2, it 12 indicates the pH of this water is 9.0. Can you 13 tell me, is that abnormal for water, drinking 14 water? 15 A <b>I'm not sure this is drinking 16 water or not.</b> 17 Q Let's go back then, okay? Because -- 18 A <b>It's just a water sample for me so 19 I don't know.</b> 20 Q At the top, if you look at the first 21 page, it identifies that it's Mr. Kiskadden, and 22 he's the person where the sample -- his house is 23 where the sample was taken. 24 And then if you look further down, it 25 indicates the sample median is water. And then it</p>	<p style="text-align: right;">236</p> <p>1 you need to use those terms in order to understand 2 what your question means. 3 MS. KENDRA SMITH: I don't understand 4 what you just said, Rick. 5 MR. WATLING: So far you said is that 6 high for drinking water. She stated terms such as 7 public drinking water. And then she -- 8 A <b>Non-public.</b> 9 MR. WATLING: And she stated 10 non-public. And she's also stated non-public 11 well is marked on this sheet. 12 MS. KENDRA SMITH: Right. 13 MR. WATLING: Then your question 14 following up was is this high for drinking 15 water. 16 MR. JOHN SMITH: You can ask it 17 two ways, would it be high for public drinking 18 water, would it be high for private. 19 BY MS. KENDRA SMITH: 20 Q Is it high for either public or 21 private drinking water, the pH? 22 A <b>I don't know what the requirement 23 is, so it's --</b> 24 Q You don't know what the average range 25 of pH for drinking water should be?</p>
<p style="text-align: right;">235</p> <p>1 indicates that there's no clear odor, and the 2 reason was it was due to a complaint. 3 Do you see all of that? 4 A <b>Yeah, but it has nothing -- I had 5 nothing, for me, just the ID number, it could 6 be anything. It's any facility.</b> 7 Q In the microbiology sample submission 8 sheet that we have that's Exhibit 7 that was 9 submitted along with Exhibit 6, which Exhibit 8 is 10 the report of, it indicates that it's a complaint 11 of water quality, do you see that? And it was 12 taken from the bathroom sink? 13 A <b>Yes.</b> 14 Q So would that give you an 15 understanding that this is drinking water that's 16 being tested? 17 A <b>It's non-public well water.</b> 18 Q Right. 19 A <b>Okay.</b> 20 Q Okay? And so for a non-public well 21 water, is this nine for pH high for drinking 22 water? 23 MR. WATLING: I object to the form of 24 the question. You say drinking water. She said 25 public drinking water, now she said well water, so</p>	<p style="text-align: right;">237</p> <p>1 A <b>Normally, yes.</b> 2 Q What is it? 3 A <b>Around seven.</b> 4 Q And so would this be higher than 5 seven? 6 A <b>This number is higher than seven.</b> 7 Q It also indicates in here on Page 2 8 that the sodium here is 297.0 MG/L. Do you see 9 that? 10 It's at the top of the second page, 11 very top. Is that high for either public or 12 private drinking water? 13 A <b>I don't know. I don't know.</b> 14 Q Do you know what the recommended 15 level for sodium is in water? 16 A <b>I don't know honestly.</b> 17 Q With regard to the pH that's here, 18 there's a comment underneath that says time limit 19 for test exceeded. Do you see that? 20 A <b>Yes.</b> 21 Q And so this is one of those 22 situations we had talked about earlier, right? So 23 with this particular pH test, was there a form or 24 request to analyze voidable samples filled out for 25 this?</p>



<p style="text-align: right;">238</p> <p>1 A No. The reason is pH is the test 2 that's supposed to be done in the field. The 3 time — the holding time for pH is as soon as 4 you take the sample and you send to the lab, 5 it's exceeded the holding time. 6 It's a field test. And that's why 7 we do the pH test, but it doesn't meet the 8 requirement. And that's why each pH results 9 always have this comment associated with it, 10 that it exceeded the holding time. 11 Q If it's always going to exceed the 12 holding time, why would that be one of the things 13 that they want you to test for? 14 A Maybe for the information purpose, 15 I don't know. 16 Q With regard to this same thing, it 17 indicates on Page 2 of this report that the 18 specific conductance at 25.0 C is 1184 umhos/cm. 19 And is that high for either drinking or public 20 water? 21 A I don't know. 22 MR. WATLING: I will object to 23 this continuing line of questioning. She 24 stated what her job is. She did not state she 25 was a water quality expert or that she makes</p>	<p style="text-align: right;">240</p> <p>1 So I routinely do not review any 2 analytical data. So if you are asking me, I 3 have not done a specific conductance analysis 4 when I was a chemist, so I don't know that 5 number. 6 Q Then if we look here, one of the 7 other measurements here is total dissolved solids, 8 and that's reported as 748 MG/L. And that total 9 dissolved solids number exceeds the secondary 10 maximum contaminant level, correct? 11 A For the drinking water. 12 Q Yes. 13 A For the public drinking water. 14 Q For the public drinking water. 15 Correct? 16 A That's correct. 17 Q You indicated that there was no form 18 request to analyze voidable samples filled out for 19 the pH because of the holding time issue, correct? 20 A I think that's correct. 21 Q And pursuant to the NJ NELAP 22 accreditation procedures, is that sufficient? 23 A If we qualify the data, then we 24 meet the standard. 25 Q So you don't have to have that other</p>
<p style="text-align: right;">239</p> <p>1 water quality determinations quantitatively. 2 She stated how the lab operates. I will make 3 that a continuing objection. 4 BY MS. KENDRA SMITH: 5 Q So in your position as the head of 6 six different divisions at the Bureau of Labs, and 7 your experience as a Chemist 1, Chemist 2, Chemist 8 3 and Chemist 4 with the DEP, you sitting here 9 today cannot tell me whether or not that specific 10 conductance number of 1184 umhos is high for 11 either private or public drinking water? 12 A I do not know the requirements at 13 this moment for the private or public drinking 14 water criteria for specific conductance, and 15 that's why I cannot say that this is high or 16 low at this moment. 17 Q And in your experience of reviewing 18 public drinking water, do you recall ever 19 reviewing any water analysis for public drinking 20 water where the specific conductance was 1184? 21 A In my current position, I do not 22 review data on a regular basis. Analyst 23 Chemist 1 and Chemist 2 reviews and uploads the 24 data. And if they have any questions, they go 25 to the section chief.</p>	<p style="text-align: right;">241</p> <p>1 form with the pH? 2 A For pH, it is, as I said, it is a 3 field test parameters. So that's the reason we 4 put this comment every time we analyze the 5 sample. 6 Q And that's consistent with the 7 procedures and standards for NJ NELAP? 8 A Yes. 9 Q It also indicates on this report that 10 the alkalinity of this drinking water sample is 11 592.2 MG/L. In your work with the DEP and Bureau 12 of Labs, as a Chemist 1 or Chemist 2, is that 13 number high for either public or private drinking 14 water? 15 A I don't know. 16 Q Have you had any experience with, in 17 your work at the DEP, analyzing water samples that 18 came from ground water well monitors that are 19 throughout the whole state? 20 A No. I don't remember. That's 21 been a long time. 22 Q And then in this test, it indicates 23 on Page 2, that potassium, sulfate, and arsenic as 24 well as manganese are all less than their 25 respective numbers that are printed next to them,</p>

242

1 correct?

2 **A That's correct.**

3 **Q** And so if I wanted to know what the

4 actual number, numerical value that was found for

5 potassium, for sulfate, for arsenic, and for

6 manganese, I would look to the QA/QC data package,

7 is that correct?

8 **A I believe so.**

9 **Q** Looking at the samples here, in

10 particular, the one sample that was specifically

11 requested on the sample submission sheet,

12 aluminum, for this one, if we look at the aluminum

13 testing result here for this June 6, 2011 water

14 sample analysis, it's listed as 207 UG/L. Is that

15 correct?

16 **A That is correct.**

17 **Q** And that 207 UG/L exceeds SMCL,

18 correct?

19 **A I don't know. I don't remember**

20 **what the requirement is.**

21 **Q** Do you know where the microbiology

22 samples might be in all of this if they're not

23 reported on here? That data should be in the

24 QA/QC data, correct?

25 **A Yes. What's the sample number?**

244

1 MS. JOHNSTON: April 12th, 2012.

2 Just let the record reflect, how many pages do

3 you think this is?

4 MS. KENDRA SMITH: I don't know,

5 you guys sent it to me.

6 MS. JOHNSTON: Yes, it looks like --

7 MS. MEGAN SMITH: It's several

8 inches thick.

9 MS. JOHNSTON: Several inches thick.

10 MS. KENDRA SMITH: She can take her

11 time and look through it.

12 BY MS. KENDRA SMITH:

13 **Q** I don't want to have you answer a

14 question you're not comfortable with. Please take

15 all the time you need to go through Exhibit 5 to

16 answer my question whether or not the microbiology

17 sample with the Lab Number 003582 exists in there,

18 the results for it, exist in there.

19 I don't want you to answer anything

20 that you are not comfortable answering.

21 MR. JOHN SMITH: For the record, I

22 think if we identify -- the date of this report

23 was 2011, June, and that was April 2012, almost a

24 year later.

25 BY MS. KENDRA SMITH:

243

1 **Q** Could you see if you could find the

2 actual results in the QA/QC data?

3 **A Supposed to be --**

4 **Q** Provided by the DEP.

5 MR. WATLING: Go off the record, with

6 counsel's permission.

7 MS. KENDRA SMITH: Sure.

8 MR. WATLING: We're off the record.

9 (Discussion held off the record.)

10 MR. JOHN SMITH: Let's go on the

11 record.

12 BY MS. KENDRA SMITH:

13 **Q** In looking through the QA/QC data

14 package that was provided with regard to Mr.

15 Kiskadden's water testing by the DEP to me, did

16 you see anything that resembled the microbiology

17 samples for the Sample Number 3582 by Collector

18 1611, Sequence Number 243?

19 **A From that data package?**

20 **Q Yes.**

21 **A I don't think so. I -- quickly I**

22 **looked at it, and I did not see that.**

23 MR. JOHN SMITH: Can we get the

24 date of the letter? Counsel, can you identify

25 the date on Gail Myers' letter?

245

1 **Q** So please take the time that you need

2 to, to look through Exhibit 5 that counsel is

3 looking through right now, to answer that

4 question.

5 **A Do you want me to look at this?**

6 MR. JOHN SMITH: We can go back

7 off the record.

8 (Discussion held off the record.)

9 MS. KENDRA SMITH: We're on the

10 record.

11 MR. WATLING: We're on the record.

12 I'm showing the deponent DEP document 006 and

13 asking the deponent what you see on this page.

14 MS. KENDRA SMITH: Is that part of

15 the QA/QC data package?

16 MR. WATLING: No, part of the

17 documents produced by the Department.

18 MS. KENDRA SMITH: I'm asking in

19 the QA/QC data. She has already testified in

20 this deposition that when there is a sample

21 submission sheet created, that data becomes

22 part of that QA/QC data package.

23 That's why the question is

24 specifically to that package. I wanted to see

25 if I missed it in that package.

246

1 MR. WATLING: Fine.  
2 BY MS. KENDRA SMITH:  
3 Q Have you had the opportunity to  
4 review that QA/QC data package?  
5 A Yes.  
6 Q Do you see any results in that QA/QC  
7 data package for the microbiology sample 003582?  
8 A No.  
9 Q With regard to the sampling, you  
10 indicated that that result should have been  
11 produced on this report because the collection ID  
12 number and the sequence number is the same for  
13 both the microbiology sample and the sample  
14 submission sheet that you, your lab, received on  
15 the same day, correct?  
16 A I don't know how this particular  
17 report is created, but if the lab ID number is  
18 used, then it will report only inorganic  
19 parameter because this lab ID is only for the  
20 inorganic parameters.  
21 But the lab report is created  
22 using the collector ID number and the sequence  
23 number, that will list all the analysis. And  
24 there could be another part of this report  
25 also.

247

1 Q So when you said you don't know how  
2 this was created, is this not a report that you  
3 would get e-mailed to you through SIS?  
4 A They will get the report, complete  
5 report, when the sample is completed. What I  
6 mean to say is that this particular document  
7 that is showing is just saying that it's  
8 inorganic analytical report.  
9 Q When we look at this report, it  
10 indicates that this is Page 1 of 2 reports, and  
11 it's actually three pages long in the printout  
12 version, but I'm assuming one of two being that  
13 it's two pages long is probably due to the  
14 printout, do you think?  
15 A That's probably correct.  
16 Q And so this may have been one of  
17 those scenarios where the suite that was requested  
18 to be tested for was completed and uploaded to  
19 SIS?  
20 A Um-hmm, yes.  
21 Q And the microbiology sample was not  
22 yet done, is that correct? Do you know?  
23 A I don't know.  
24 Q Have you ever seen the SIS final  
25 report of this microbiology sample 3582? The

248

1 actual report.  
2 A Yes.  
3 Q Where did you see that?  
4 A I — completed in the second data  
5 package that I submitted.  
6 Q So the stuff that I was just handed  
7 ten minutes before the deposition, the lab report  
8 through SIS for the microbiology sample is in that  
9 package, correct?  
10 A I believe so. I'm not a hundred  
11 percent sure, but I think it is. Can I look  
12 into this myself?  
13 Q Sure.  
14 A I don't know —  
15 Q You're quicker to find it than I.  
16 MR. WATLING: Is that it?  
17 A Yes. Let me just double-check.  
18 BY MS. KENDRA SMITH:  
19 Q Sure.  
20 A Yes.  
21 MS. MEGAN SMITH: I'm sorry, but  
22 what are you all looking at? I don't have a  
23 copy of it.  
24 MR. JOHN SMITH: I'm not sure  
25 which one she's looking at. Are we ready to go

249

1 on, Rick?  
2 MR. WATLING: Did this come from  
3 this pile? Taru?  
4 A Yes.  
5 MR. JOHN SMITH: That packet of  
6 documents he gave us this morning, Megan, it's  
7 the last document.  
8 MS. MEGAN SMITH: I guess you will  
9 deal with that on the record so I can figure it  
10 out later.  
11 MS. KENDRA SMITH: I'm not sure I  
12 want to give up my copy, but I guess we can  
13 make it the exhibit.  
14 BY MS. KENDRA SMITH:  
15 Q Let's just compare them and make sure  
16 I'm look at the same thing you are looking at.  
17 A It's the same sample number, it's  
18 the same copy, you can see that.  
19 Q Right.  
20 A And there is the report, SIS  
21 report.  
22 MS. KENDRA SMITH: Okay. So we  
23 will mark this one as Exhibit 9.  
24 (Microbiology Sample Submission  
25 Sheet for PA DEP marked as Exhibit Number 9.)

<p style="text-align: right;">250</p> <p>1 BY MS. KENDRA SMITH:</p> <p>2 Q If I can refer to this copy and you</p> <p>3 can refer to that copy. On the last page of</p> <p>4 Exhibit 9, first of all, where Exhibit 9 is coming</p> <p>5 from, so it's clear on the record, Exhibit 9 is</p> <p>6 from not the QA/QC data package that was provided</p> <p>7 to me with regard to Mr. Kiskadden's water</p> <p>8 analysis per Gail Myers letter to me, but was</p> <p>9 subsequently produced today ten minutes before the</p> <p>10 deposition. And it appears to be the last page of</p> <p>11 the -- or last couple of pages of the production.</p> <p>12 So if we turn to, it's stapled</p> <p>13 together, there's one, two, three, four, five, six</p> <p>14 pages of that exhibit, what we now are calling</p> <p>15 Exhibit 9. If we turn to the last two pages of</p> <p>16 it. At the top of that page, it indicates the</p> <p>17 sample ID Number 1611243, correct?</p> <p>18 A That's correct.</p> <p>19 Q And that's the same as Exhibit 8,</p> <p>20 correct?</p> <p>21 A That's correct.</p> <p>22 Q And then it indicates here the lab</p> <p>23 sample ID number of B201 -- 2011 00 3582, correct?</p> <p>24 A That's correct.</p> <p>25 Q Is there any way on these -- if we</p>	<p style="text-align: right;">252</p> <p>1 sample was approved. On the report, if you</p> <p>2 look at the bottom, it has a date. And then if</p> <p>3 you go to the second line, it says analyzed.</p> <p>4 And there's a date in there it says 6 -- June</p> <p>5 7, 2011.</p> <p>6 Q Right.</p> <p>7 A That's the date it was completed.</p> <p>8 Q Right. And so once it's completed,</p> <p>9 it gets uploaded.</p> <p>10 A Correct.</p> <p>11 Q And then goes to SIS, correct?</p> <p>12 A Correct.</p> <p>13 Q So then why would there be a date of</p> <p>14 issue of September 4, 2012?</p> <p>15 A I don't know the answer to that</p> <p>16 question.</p> <p>17 Q If we look at Exhibit 8 and Exhibit 9</p> <p>18 together, the SIS final report here, it indicates</p> <p>19 that the E. coli and the total coliform was</p> <p>20 analyzed on 6-7-2011 at 10:15. Did I read that</p> <p>21 right?</p> <p>22 A Correct.</p> <p>23 Q Then on the sample for all of the</p> <p>24 other things that were requested that day by way</p> <p>25 of standard analysis 942, on Sample 15947, which</p>
<p style="text-align: right;">251</p> <p>1 look and we put Exhibit 9 and 8 together, on it,</p> <p>2 it indicates that the -- I guess that won't help.</p> <p>3 Is there anything on here that would</p> <p>4 be able to tell you when Exhibit 8 was uploaded to</p> <p>5 SIS and when Exhibit 9 was uploaded to SIS?</p> <p>6 A I don't know.</p> <p>7 Q And so if we look at Exhibit 8 and</p> <p>8 Exhibit 9 and we look at the date of issue for</p> <p>9 those, do you see that at the top of the page?</p> <p>10 A Um-hmm, yes.</p> <p>11 Q The date of issue for the E. coli and</p> <p>12 the total coliform sample ID Number 03582 was</p> <p>13 9-4-2012. Do you see that?</p> <p>14 A Yes.</p> <p>15 Q The issue date for the suite of</p> <p>16 compounds that were asked to be tested for by way</p> <p>17 of sample analysis 015947, the date of issue</p> <p>18 6-29-11. Any idea why those are so far apart?</p> <p>19 A I don't know. I don't know for</p> <p>20 this particular reason.</p> <p>21 Q When it lists the date of issue on a</p> <p>22 report, that's the date that it was approved for</p> <p>23 release to the client, correct?</p> <p>24 A No, that's not correct. Reported</p> <p>25 results -- date analyzed is the one which the</p>	<p style="text-align: right;">253</p> <p>1 the DEP received together, those analysis dates</p> <p>2 begin with 6-8-2011, correct?</p> <p>3 A Correct.</p> <p>4 Q So they were analyzed, the E. coli</p> <p>5 and coliform was done a day before the results in</p> <p>6 Lab Number 15947?</p> <p>7 A Correct.</p> <p>8 Q So how would it be that this</p> <p>9 particular one for the E. coli and total coliform</p> <p>10 wouldn't be in the QA/QC data package if it was</p> <p>11 done before the laboratory Sample 15947 and that</p> <p>12 is in there?</p> <p>13 A We have the QC data package. When</p> <p>14 it was requested, we just pulled the data --</p> <p>15 this, the QC data package is for each section.</p> <p>16 So for even you request, like,</p> <p>17 metal data, the metal data was put together in</p> <p>18 here. And somehow bacteria, we have the</p> <p>19 bacteria, as you see from Exhibit 9, but when</p> <p>20 we provide you the first set, this set</p> <p>21 (indicating), we -- I don't know -- I don't</p> <p>22 know what happened, but it was not a part of</p> <p>23 this package. Because we have it in the lab,</p> <p>24 but it was not be -- with the package.</p> <p>25 Q So the QA/QC data package that was</p>

254

1 given originally by Ms. Myers as per her cover  
2 letter, that wasn't the complete package, correct?  
3 **A That data was not there in the**  
4 **package.**  
5 Q So it was incomplete, correct?  
6 **A Yes.**  
7 Q Yes, it was not complete? Am I  
8 correct in that statement?  
9 **A That data was not in that**  
10 **requested package, yes.**  
11 Q And so that data package that I was  
12 given was not complete.  
13 MR. WATLING: Objection as to the  
14 form.  
15 BY MS. KENDRA SMITH:  
16 Q I just need a yes or no answer.  
17 MR. WATLING: Vague --  
18 MS. KENDRA SMITH: It's not vague.  
19 MR. WATLING: -- and ambiguous as to  
20 complete. She's telling you exactly what she's  
21 telling you.  
22 MR. JOHN SMITH: She answering the  
23 question, she's just not answering it specifically  
24 enough.  
25 BY MS. KENDRA SMITH:

255

1 Q So the original QA/QC data that Ms.  
2 Myers sent to me per her cover letter on Exhibit  
3 5, that was not the complete QA/QC data for Mr.  
4 Kiskadden's water testing, correct?  
5 **A Yes.**  
6 Q Do you know whether or not that date  
7 of issue that's up there, if that's a print date?  
8 **A I don't know. I don't have the**  
9 **answer that question.**  
10 Q I'm going to hand you what's been  
11 marked as Exhibit 10 to this deposition.  
12 (Analytical data marked as Exhibit  
13 Number 10.)  
14 BY MS. KENDRA SMITH:  
15 Q Do you recognize that document?  
16 **A It's some kind of analytical data.**  
17 Q Would this -- I will represent to you  
18 that this was contained within that QA/QC data  
19 package submitted to me by Ms. Myers with regard  
20 to Mr. Kiskadden's water testing.  
21 In looking at the Exhibit 10, we can  
22 see, if we look at in referencing Exhibit Number  
23 6, the sample submission sheet, the sample  
24 submission sheet for the 6-6-11 sample that was  
25 collected from Mr. Kiskadden's home was given a

256

1 lab number of 015947, correct?  
2 **A Yes.**  
3 Q Then if we look to Exhibit 8, Exhibit  
4 8 references that same lab sample number, 015947,  
5 correct? On the final.  
6 **A Yes.**  
7 Q And if we look at Exhibit 10, it  
8 references the sample ID number at the top  
9 left-hand corner 15947, correct?  
10 **A Yes.**  
11 Q And so this would be numerical values  
12 of the suite that was asked to be tested for by  
13 the Oil & Gas Department on Mr. Kiskadden's  
14 drinking water, correct?  
15 **A This is an analytical report for**  
16 **the particular sample.**  
17 Q So it being the analytical report for  
18 Mr. Kiskadden's water with the sample ID Number  
19 15947, correct?  
20 **A Correct.**  
21 Q When we were looking before at  
22 Exhibit 8, we had identified potassium, sulfate,  
23 arsenic and manganese as being less than, correct?  
24 **A Correct.**  
25 Q So if I wanted to see, as we spoke

257

1 about before, what the actual numerical value was  
2 for those that were reported as less than's, I  
3 would look to this data, correct?  
4 **A Not for sulfate. Sulfate is not a**  
5 **metal, so --**  
6 Q Yeah, if you turn the page, I think I  
7 included the sulfate one.  
8 **A Okay. I was just looking at --**  
9 Q Double-check me.  
10 **A No, I was just looking at the --**  
11 Q At the first page, okay.  
12 **A Okay.**  
13 Q I think it should be maybe the last  
14 two.  
15 **A Yeah.**  
16 Q Is that correct?  
17 **A Yes. Let me see here. So**  
18 **looking, if we could, at the first page, for**  
19 **potassium, which has the Periodic Table**  
20 **identification as a K, correct?**  
21 **A That's correct.**  
22 Q It's .829 MG/L, that's the numerical  
23 value that was detected, correct?  
24 **A Correct.**  
25 Q And then if we look at, skipping the

258

1 sulfate and the arsenic for a minute, if we look  
2 at the manganese, and that's listed, and that  
3 would be listed under its Periodic Table Mn. If  
4 we look across, it's .009 MG/L, correct?  
5 **A Correct.**  
6 **Q** If we turn the page of this, on the  
7 second page, there is sample ID Number 15947, do  
8 you see that?  
9 **A Yes.**  
10 **Q** Then if we look to the first page  
11 where it indicates 15947, it indicates that that  
12 was run at 10:00, or 10:28:13. Do you see that at  
13 the top right-hand corner?  
14 **A Yes.**  
15 **Q** Is that correct? And the second page  
16 indicates that it was run on the same day, but  
17 12:28:36, correct?  
18 **A 12:30.**  
19 **Q** 12:28:36?  
20 **A That's the sequence number -- oh,**  
21 **yeah.**  
22 **Q** You see the time? I'm looking at the  
23 time of the runs.  
24 **A Yes.**  
25 **Q** So certain samples for Mr. Kiskadden,

259

1 based on this data, was run twice, is that  
2 accurate?  
3 **A Yes.**  
4 **Q** And so if we look at the second page,  
5 and we look to the aluminum that was run at  
6 12:28:36, do you see that?  
7 **A Yes.**  
8 **Q** That's a different number, correct?  
9 It's .206 MG/L, correct?  
10 **A Yes.**  
11 **Q** And so when you have a situation like  
12 that, how is it determined which of the two  
13 numbers, the actual numerical value that's found,  
14 will be reported on this final report?  
15 **A Analysts follow the SOP, standard**  
16 **operating procedures. They look at the QC**  
17 **data, instrument QC data. If there is any**  
18 **problem with any instrument run or quality**  
19 **control, they will rerun the sample.**  
20 **And then any data which meets the**  
21 **acceptance criteria, they will report it.**  
22 **That's the process we follow.**  
23 **I cannot say anything particular**  
24 **for this particular run because I did not**  
25 **analyze this sample.**

260

1 **Q** And on this sample that you looked at  
2 for Mr. Kiskadden's water that was run twice, is  
3 there any indication in this data as to why that  
4 was done?  
5 **A I don't know.**  
6 **Q** Is there any markings, are there any  
7 stars, are there any other qualifiers like the  
8 qualifiers we talked about before as to why it  
9 would have been run again?  
10 **A I don't know.**  
11 **Q** If you can look, and if there's  
12 anything there.  
13 **A I don't know. I don't do metal.**  
14 **I don't know about looking at this data, why it**  
15 **was rerun.**  
16 **Q** Is there anything else in the QA/QC  
17 data package that would tell you why it was  
18 redone?  
19 **A I don't know.**  
20 **Q** Do you know why only the specific  
21 metals listed on the second page were rerun and  
22 not the whole suite?  
23 **A I don't know.**  
24 **Q** Then also on this same sample, the  
25 sulfate was reported as less than 15 MG/L. And

261

1 from the sulfate data that is in QA/QC data that  
2 is in the Exhibit 10, could you tell me what the  
3 actual amount was?  
4 **A Let me just find the sample first.**  
5 **71664.**  
6 **Q** And that's on the second page,  
7 correct?  
8 **A It's on Page 4.**  
9 **Q** I'm -- yeah, I'm sorry. There's --  
10 **MR. JOHN SMITH: There's actually**  
11 **more than that.**  
12 **BY MS. KENDRA SMITH:**  
13 **Q** So it's on the last page of Exhibit  
14 10, let's put it that way. And under sample  
15 15947, correct?  
16 **A That is correct.**  
17 **Q** So the actual amount of sulfates  
18 found in Mr. Kiskadden's water was 7.664 MG/L?  
19 **A Correct.**  
20 **Q** Then we also had, on the Exhibit 8,  
21 arsenic that was reported as less than 3.0 UG/L,  
22 correct?  
23 **A Correct.**  
24 **Q** And if we look to Sample 10, could  
25 you tell me what the actual amount of arsenic was

66 (Pages 258 to 261)

<p style="text-align: right;">262</p> <p>1 in Mr. Kiskadden's drinking water?</p> <p>2 A It's less than three.</p> <p>3 Q What's the actual numerical value?</p> <p>4 A I will tell you honestly, I don't</p> <p>5 know which one is reported, arsenic or arsenic</p> <p>6 1. They both were less than three.</p> <p>7 Q And you are reading from the</p> <p>8 concentrated SD -- C-O-N period SD column? You</p> <p>9 see that at the top of the page, it says</p> <p>10 concentrated results, and one of the columns has</p> <p>11 the title C-O-N-C?</p> <p>12 A Yes.</p> <p>13 Q So you don't know whether it's the</p> <p>14 .237 UG/L, which would be below three, or the .083</p> <p>15 UG/L, is that right?</p> <p>16 A Yeah, I don't know. I mean, all I</p> <p>17 know is less than three.</p> <p>18 Q So looking further into Exhibit 10,</p> <p>19 if you turn the page, there is sample ID 5947 done</p> <p>20 June 9, 2011 at 11:49:36. And this sample here</p> <p>21 for arsenic on the same sample 15947 was run June</p> <p>22 9, 2011, 11:45:42, correct?</p> <p>23 A Let me just make sure. Correct.</p> <p>24 Q And so in looking at the run that</p> <p>25 occurred approximately three minutes after this</p>	<p style="text-align: right;">264</p> <p>1 A It looks like that, yes.</p> <p>2 MR. WATLING: Object to the form</p> <p>3 of the question, vague and ambiguous, much</p> <p>4 higher.</p> <p>5 MR. JOHN SMITH: She answered it.</p> <p>6 BY MS. KENDRA SMITH:</p> <p>7 Q Going back now to the first page of</p> <p>8 Exhibit Number 10, in Exhibit 10 on the first page</p> <p>9 as I look at sample ID 15947, on that, there</p> <p>10 appears to be many more components analyzed for</p> <p>11 than were reported on Exhibit 8. Can you look at</p> <p>12 Exhibit 8 and Exhibit 10.</p> <p>13 A Okay, yes.</p> <p>14 Q Would you agree with that?</p> <p>15 A Yes.</p> <p>16 Q Could you tell me why the compounds</p> <p>17 that are listed in Exhibit 10, all of them don't</p> <p>18 show up on Exhibit 8, the final SIS report?</p> <p>19 A The process is that when we</p> <p>20 calibrate the instrument, we just don't</p> <p>21 calibrate for one metal. We calibrate the</p> <p>22 instrument with number of metals. And we don't</p> <p>23 use -- each sample that we receive is a</p> <p>24 specific request for metals.</p> <p>25 So when the sample is logged, we</p>
<p style="text-align: right;">263</p> <p>1 first run that we looked at for arsenic, could you</p> <p>2 tell me what amount of arsenic was actually found</p> <p>3 in Mr. Kiskadden's drinking water?</p> <p>4 A I cannot say that because I don't</p> <p>5 know.</p> <p>6 Q And so you don't know because it's</p> <p>7 either As or As-1 on this?</p> <p>8 A I don't know, I don't do -- I did</p> <p>9 not do this analysis, so I cannot say which one</p> <p>10 is actual -- all I know is that whatever data</p> <p>11 is reported is less than three milligrams per</p> <p>12 -- micrograms per liter.</p> <p>13 Q And so I guess that's what I'm</p> <p>14 asking, and even looking at this second run for</p> <p>15 the arsenic, the arsenic levels listed here are</p> <p>16 2.847 and 2.672 UG/L, correct?</p> <p>17 A That's correct.</p> <p>18 Q And so with these two, do you know,</p> <p>19 is there any indication to you in this QA/QC data</p> <p>20 package as to why the arsenic was run twice?</p> <p>21 A I don't know.</p> <p>22 Q And seemingly the second time the</p> <p>23 arsenic was run, it was much higher in this sample</p> <p>24 than the first time, correct? If you compare the</p> <p>25 two.</p>	<p style="text-align: right;">265</p> <p>1 log those samples for the requested metals.</p> <p>2 But we cannot pick and choose for each metal to</p> <p>3 analyze.</p> <p>4 So we put batch of samples on</p> <p>5 instrument. So instrument will run for each</p> <p>6 metal that it's calibrated for. So that's why</p> <p>7 this report is from the instrument that will</p> <p>8 read the number for that metals that's</p> <p>9 calibrated. We report the results what is</p> <p>10 requested.</p> <p>11 Q I understand. So with all of these</p> <p>12 that were tested here in Exhibit 10, were they all</p> <p>13 entered into the LIMS system?</p> <p>14 A Only those tests that are reported</p> <p>15 in LIMS which are requested.</p> <p>16 Q And so with these, even though there</p> <p>17 are additional things that are tested for that</p> <p>18 weren't requested, those never got uploaded into</p> <p>19 LIMS?</p> <p>20 A It was not.</p> <p>21 Q Why is that?</p> <p>22 A If it was not requested, we don't</p> <p>23 need to look into that data.</p> <p>24 Q So if someone wanted to know what</p> <p>25 additional things were tested for in a particular</p>

266

1 sample, they would have to look to this QA/QC data  
2 package, is that correct?  
3 **A** If our client wants to know, and  
4 they formally request that we would like to add  
5 this test, additional test, then we can provide  
6 that information to our client.  
7 MR. JOHN SMITH: That's not the  
8 question.  
9 BY MS. KENDRA SMITH:  
10 **Q** So my question is, is if you wanted  
11 to know what was tested for additionally other  
12 than what was reported, you would have to look to  
13 the QA/QC data to find the additional compounds  
14 that were tested for, correct? In this particular  
15 sample.  
16 **A** Yes.  
17 **Q** When we look at Exhibit 8 and compare  
18 that to Exhibit 10, it appears on Exhibit 8, the  
19 things that were found in Mr. Kiskadden's water  
20 that were not reported by the DEP were cobalt at  
21 .001 MG/L, correct?  
22 **A** Let me just check. .204, yes.  
23 **Q** And then another component tested for  
24 by the DEP on Mr. Kiskadden's drinking water but  
25 not reported on the final report was copper at

268

1 **A** You mean --  
2 **Q** 002, I'm sorry.  
3 **A** 002.  
4 **Q** 002, is that correct?  
5 **A** Yes.  
6 MR. WATLING: Make a continuing  
7 objection to this line of questioning and the  
8 way that the questions are phrased.  
9 She's explained that these  
10 machines test for these metals and that some of  
11 the results were requested in a report via a  
12 suite code. And it wasn't that the department  
13 intentionally didn't report anything.  
14 MR. JOHN SMITH: You know what,  
15 you can tell that to the Judge. But  
16 ultimately, she testified completely different  
17 two hours ago, which you can read back later.  
18 But go ahead.  
19 BY MS. KENDRA SMITH:  
20 **Q** So --  
21 **A** I can say --  
22 **Q** There has to be a question pending  
23 for you to answer, ma'am, from the deposition,  
24 okay?  
25 Also, in the Exhibit 10, there was

267

1 .008 MG/L, correct?  
2 **A** That's correct.  
3 **Q** And then in addition, there was also  
4 silicon tested for by the DEP but not reported on  
5 the final report, correct?  
6 **A** As I said, we analyze the sample  
7 for a bunch of metals --  
8 MR. JOHN SMITH: Answer the  
9 question, ma'am.  
10 BY MS. KENDRA SMITH:  
11 **Q** I understand.  
12 MR. WATLING: Allow her to answer the  
13 question, please.  
14 BY MS. KENDRA SMITH:  
15 **Q** If you could answer the question.  
16 **A** Yes.  
17 **Q** And that silicon in Mr. Kiskadden's  
18 water that was not reported by the DEP was at 3.97  
19 MG/L, correct?  
20 **A** 3.98.  
21 **Q** I'm sorry, what? 3.98. I'm sorry, I  
22 said 97. 98 MG/L. And also tested for but not  
23 reported in the final report by the DEP regarding  
24 Mr. Kiskadden's drinking water was tin at .003  
25 MG/L, correct?

269

1 titanium tested for in Mr. Kiskadden's drinking  
2 water that was not reported on the final report,  
3 Exhibit 8, in the amount of .002, correct?  
4 **A** It was not requested to BOL to  
5 report it.  
6 **Q** I understand --  
7 MR. JOHN SMITH: Does that make it  
8 any less in his water, ma'am?  
9 MR. WATLING: Let's stick with one  
10 questioner, please.  
11 MR. JOHN SMITH: You don't have to  
12 answer that. I think you know the answer.  
13 BY MS. KENDRA SMITH:  
14 **Q** I understand that it wasn't  
15 requested. And that's why I'm asking you about  
16 the stuff that was tested for but not reported.  
17 Okay?  
18 So with regard to titanium, titanium  
19 was found in Mr. Kiskadden's drinking water, but  
20 was not reported on the final report by the DEP,  
21 and it was found in the amount of 002, correct?  
22 **A** That's correct.  
23 **Q** And then in addition, zinc was also  
24 tested for by the Bureau of Labs of the DEP in Mr.  
25 Kiskadden's drinking water, but it was not



270

1 reported on its final report and it was found in  
2 the amount of .010 MG/L in his drinking water,  
3 correct?  
4 **A BOL did not report that zinc**  
5 **because it was not requested to report.**  
6 Q I understand.  
7 **A I'm just making my statement also.**  
8 MR. JOHN SMITH: Right.  
9 BY MS. KENDRA SMITH:  
10 Q I understand, but you have to answer  
11 the question that's posed.  
12 **A I am answering your question that**  
13 **it was not requested, it was not report -- to**  
14 **BOL, and BOL did not report it.**  
15 MR. JOHN SMITH: Right, except for  
16 the --  
17 BY MS. KENDRA SMITH:  
18 Q I understand that. All I'm asking  
19 is, in the QA/QC data, Mr. Kiskadden's drinking  
20 water was tested for zinc, correct?  
21 **A Correct.**  
22 Q And it was found at .011 MG/L,  
23 correct?  
24 **A Correct.**  
25 Q And it was not reported on the final

271

1 report, Exhibit 8.  
2 **A Again, I am saying, it is not**  
3 **reported on our final report because it was not**  
4 **requested to report it.**  
5 Q I understand.  
6 **A I am understanding. I'm making it**  
7 **clear.**  
8 MR. JOHN SMITH: The question is,  
9 is there any less in his water because you  
10 don't feel like reporting it?  
11 MR. WATLING: That is  
12 argumentative, and we can call off this  
13 deposition right now.  
14 **A That is not that we did not feel**  
15 **like to report it. It was not requested by our**  
16 **client for that particular test, so we did --**  
17 **it is not on our final report.**  
18 BY MS. KENDRA SMITH:  
19 Q And your client for this particular  
20 test was the DEP Oil & Gas Department, correct?  
21 **A That's correct.**  
22 Q And so the zinc that was found that  
23 was never reported was still in Mr. Kiskadden's  
24 water, correct?  
25 **A That's the water sample, yes.**

272

1 Q It also indicates in Exhibit 10, that  
2 the DEP Bureau of Labs tested for and found in Mr.  
3 Kiskadden's water test boron at a level of .245  
4 MG/L, correct?  
5 It's all the way at the bottom. It's  
6 the last one, if you look at them, you have to  
7 look at the second one because of the hole.  
8 **A Yes.**  
9 Q And so boron was found in Mr.  
10 Kiskadden's drinking water but was not reported on  
11 the final report from the DEP, correct?  
12 MR. WATLING: I object to the form.  
13 The word found, reported, are being tossed about  
14 loosely. She fully explained how the Bureau of  
15 Labs work, and this is getting argumentative.  
16 MS. MEGAN SMITH: Can we go off the  
17 record for a moment.  
18 MR. JOHN SMITH: No.  
19 MS. KENDRA SMITH: No, we're not  
20 going off the record. I just want to get through  
21 this, guys, it's late.  
22 MS. MEGAN SMITH: Can't we stipulate,  
23 I mean, do we need to list every --  
24 MS. KENDRA SMITH: Yeah, we need to  
25 list them.

273

1 MR. JOHN SMITH: Yes.  
2 BY MS. KENDRA SMITH:  
3 Q With regard to the second run, if you  
4 turn to the second page of the Exhibit 10, the  
5 second run of that indicates that silicon in the  
6 amount of 4.05 MG/L's were found in Mr.  
7 Kiskadden's drinking water, correct?  
8 **A That's correct.**  
9 Q But it was not reported on the final  
10 report issued by the DEP, correct?  
11 **A That was not requested. That was**  
12 **also not reported.**  
13 Q If the Bureau of Oil & Gas Management  
14 wanted to see what other things Mr. Kiskadden's  
15 water was tested for, could they have called your  
16 lab and asked for this QA/QC data to review?  
17 **A They could.**  
18 Q And could they have called your lab  
19 and asked to either speak with you or another  
20 division or section manager and ask them to review  
21 the QA/QC data and see what else was tested for?  
22 **A They could.**  
23 Q And did you ever receive a call from  
24 the Oil & Gas Management to --  
25 **A No.**

<p style="text-align: right;">274</p> <p>1 Q Okay.</p> <p>2 A That's what I -- I was thinking</p> <p>3 about it. We never got that request, somebody</p> <p>4 look -- asking for additional QA/QC data.</p> <p>5 Q And so Mr. Alan Eichler and no one</p> <p>6 else from the Oil &amp; Gas Management section of the</p> <p>7 DEP ever called the lab and requested the QA/QC</p> <p>8 data or requested that anyone at the lab tell them</p> <p>9 what other compounds were found in Mr. Kiskadden's</p> <p>10 water?</p> <p>11 A Not to my knowledge.</p> <p>12 I have to make a phone call. I</p> <p>13 was supposed to help somebody at 6:00, and I'm</p> <p>14 here.</p> <p>15 MR. WATLING: Let's take a break.</p> <p>16 A I need to take a break.</p> <p>17 MS. KENDRA SMITH: Okay.</p> <p>18 (Brief recess.)</p> <p>19 (Sample Submission Form marked as</p> <p>20 Exhibit Number 11.)</p> <p>21 BY MS. KENDRA SMITH:</p> <p>22 Q I'm handing you what's been marked as</p> <p>23 Exhibit 11.</p> <p>24 A What is 5?</p> <p>25 Q The big QA/QC package.</p>	<p style="text-align: right;">276</p> <p>1 Q And those two preserved organic</p> <p>2 bottles reference these blank samples.</p> <p>3 A That is correct.</p> <p>4 Q On here, these blank samples have a</p> <p>5 legal seal number, correct?</p> <p>6 A That is correct.</p> <p>7 Q And because they're blank samples, do</p> <p>8 they require that legal seal number under your</p> <p>9 procedures?</p> <p>10 A No.</p> <p>11 Q Do you know why that was done in this</p> <p>12 case?</p> <p>13 A That's up to them.</p> <p>14 Q Is there any way from this sample</p> <p>15 submission sheet to tell where these blank samples</p> <p>16 came from?</p> <p>17 A No, I don't know. We don't know.</p> <p>18 Q These blank samples got the lab</p> <p>19 number of 2011 00 6015, is that correct?</p> <p>20 A That's correct.</p> <p>21 (Analytical Report for Land</p> <p>22 Recycling &amp; Waste Management marked as Exhibit</p> <p>23 Number 12.)</p> <p>24 BY MS. KENDRA SMITH:</p> <p>25 Q I'm handing you what's been marked as</p>
<p style="text-align: right;">275</p> <p>1 A I'm sorry.</p> <p>2 Q I have handed you what's marked as</p> <p>3 Exhibit 11. Recognize that document?</p> <p>4 A Yeah, that's a sample submission</p> <p>5 form.</p> <p>6 Q Could you tell me, there's, under</p> <p>7 additional information, there, in quotes, blank</p> <p>8 samples, can you tell me what that refers to?</p> <p>9 A Yes. If you look at the SAC code,</p> <p>10 it says VOA DW, and one of the metric</p> <p>11 requirements is whenever they submit VOA</p> <p>12 drinking water sample, which is DW, they are</p> <p>13 supposed to submit a field blank with it. And</p> <p>14 that's what the field blank sample is.</p> <p>15 Q And is a field blank just a sealed</p> <p>16 container of water that they carry to the site and</p> <p>17 then send back?</p> <p>18 A Correct.</p> <p>19 Q So it's not collected anywhere at the</p> <p>20 site.</p> <p>21 A No.</p> <p>22 Q And this particular lab submission</p> <p>23 sheet indicates that there's two preserved organic</p> <p>24 bottles that are sent?</p> <p>25 A That is correct.</p>	<p style="text-align: right;">277</p> <p>1 Exhibit 12. Do you recognize this document?</p> <p>2 A Yes.</p> <p>3 Q And this is a final report from the</p> <p>4 Bureau of Labs, correct?</p> <p>5 A Correct.</p> <p>6 Q This report that we have labeled</p> <p>7 Exhibit 12, references or corresponds with the</p> <p>8 sample submission sheet at Exhibit 11, correct?</p> <p>9 A That's correct.</p> <p>10 Q And in this final report, all of the</p> <p>11 things that were tested for here have a U next to</p> <p>12 them, correct?</p> <p>13 A That is correct.</p> <p>14 Q And so going by the qualifiers that</p> <p>15 are here, it indicates that the compound is tested</p> <p>16 for, but not detected, correct?</p> <p>17 A That's correct.</p> <p>18 Q And this was the blank sample?</p> <p>19 A That's a field blank sample.</p> <p>20 Q Field blank sample. So with a field</p> <p>21 blank sample, is that used as a control in the</p> <p>22 method reference here, the VOA --</p> <p>23 A That is a required QC by the</p> <p>24 reference method. There's no contamination</p> <p>25 from the field.</p>

278

1 Q And so this is required -- is this  
2 required to be run at the same time that you're  
3 running another sample from the field?  
4 A **That's correct.**  
5 Q In the sample blank, based on this  
6 report, there was no contamination found, correct?  
7 A **Correct.**  
8 Q Incidentally, this suite VOA DW, is  
9 that another customized suite code, or is that a  
10 standard method code?  
11 A **I'm not a hundred percent sure was**  
12 **it customized or standard method code, but it**  
13 **has all the parameters listed. I'm not sure**  
14 **about that right now.**  
15 Q The things that were tested for on  
16 here via this suite VOA DY --  
17 A **DW. I'm sorry.**  
18 Q The VOA DW?  
19 A **Um-hmm.**  
20 Q That suite code, what on here does it  
21 show that it was tested for, what are these things  
22 that are on here?  
23 A **These are the analytes in EPA**  
24 **reference method for drinking water parameters.**  
25 Q So are these volatile organic

279

1 compounds?  
2 A **Volatile organic compounds.**  
3 Q Are there any semi-volatile organic  
4 compounds in here?  
5 A **No.**  
6 Q So just volatile organic compounds?  
7 A **This test is for volatile organic**  
8 **compounds.**  
9 Q I'm going to hand you what's being  
10 marked as Exhibit 13 to this deposition.  
11 (Target Compounds marked as Exhibit  
12 Number 13.)  
13 BY MS. KENDRA SMITH:  
14 Q Do you recognize Exhibit 13?  
15 A **Yes.**  
16 Q What is Exhibit 13 a printout of?  
17 A **That's a printout from the data**  
18 **from the lab.**  
19 Q And this is for the sample blank?  
20 A **That is correct.**  
21 Q Again, in this sample blank, these  
22 results that are listed here correspond with what  
23 was reported in Exhibit 12, correct?  
24 A **That's correct.**  
25 Q I'm going to hand you what's being

280

1 marked as Exhibit 14.  
2 (Internal Standard Compounds Area and  
3 RT Summary marked as Exhibit Number 14.)  
4 BY MS. KENDRA SMITH:  
5 Q Do you recognize this document?  
6 A **It's some kind of analytical data**  
7 **for water analysis.**  
8 Q If you could turn to the second page,  
9 please. On there it is referencing again the  
10 blank samples, 6015, correct?  
11 A **Correct.**  
12 Q What's listed here are the actual  
13 surrogates used to analyze those blank samples, is  
14 that correct?  
15 A **Yes.**  
16 Q And these are -- let me rephrase  
17 that. Are these standard surrogates used at the  
18 Bureau of Labs for VOCs?  
19 A **Yes.**  
20 Q And even though it says surrogate  
21 compound at the top really big there, we also know  
22 that it's a surrogate because of the little  
23 qualifier next to it, correct, it looks like a  
24 little dollar sign?  
25 A **I don't know about that.**

281

1 Q Okay. And I'm asking you that  
2 because I have not seen it on the qualifier list,  
3 and I didn't know if that was a qualifier that  
4 existed in the computer system.  
5 A **I don't know.**  
6 Q Incidentally, in looking at Exhibit  
7 13 and 14, is there any indication that there was  
8 anything wrong or anything encountered during the  
9 testing of these blank samples at all?  
10 A **I don't know. I wasn't looking at**  
11 **this.**  
12 Q There's nothing indicated in the page  
13 on the surrogates that there was any problem with  
14 the recoveries, the percentages of recoveries?  
15 A **I don't know the acceptance**  
16 **criteria off my head right now so I don't know**  
17 **what the requirement is, but so I cannot answer**  
18 **that question.**  
19 Q But there's no handwritten notes that  
20 it had to be rerun or anything that --  
21 A **I don't see that here.**  
22 Q The surrogates that were used for  
23 that blank sample were 20 1, 2-Dichloroethane,  
24 correct?  
25 A **That's correct.**

<p style="text-align: right;">282</p> <p>1 Q Also a surrogate that was used on the 2 blank samples was 36 Toluene-d8, correct? 3 A <b>That's correct.</b> 4 Q And also used as a surrogate on those 5 blank samples were 53 Bromofluorobenzene, is that 6 correct? 7 A <b>Yes.</b> 8 Q And under the method that requires 9 blank samples to also be tested with the field 10 samples that are taken, does it require to use the 11 same surrogates? 12 A <b>Yes, all samples get the same</b> 13 <b>surrogates.</b> 14 <b>(Organics Laboratory Qualifiers</b> 15 <b>marked as Exhibit Number 15.)</b> 16 BY MS. KENDRA SMITH: 17 Q I'm going to hand you what's been 18 marked as Exhibit 15. 19 Just going back for a second to 20 Exhibit 14. Nowhere on this chart, this surrogate 21 compound chart, does it list acetone, t-Butyl 22 alcohol or chloroform as being surrogates used, 23 correct? 24 A <b>That's correct.</b> 25 Q Let me ask this, do you recognize</p>	<p style="text-align: right;">284</p> <p>1 right-hand corner 2011 00 6014. 2 MS. MEGAN SMITH: Yes, I do have a 3 copy, thank you. 4 BY MS. KENDRA SMITH: 5 Q On this sample submission sheet, it 6 indicates that there were two preserved organic 7 bottles sent, correct? 8 A <b>That's correct.</b> 9 Q And if we look at this sample 10 submission sheet in comparison to Exhibit 11, 11 which are the blank sample submission sheets. 12 A <b>Okay.</b> 13 Q We see that the sample submission 14 sheet labeled Exhibit 16, is dated 8-1-11, 15 correct? 16 A <b>That's correct.</b> 17 Q And the sample submission sheet at 18 Exhibit Number 11, is dated 8-1-11, correct? 19 A <b>Correct.</b> 20 Q And they both have the same collector 21 ID and sequence number, correct? 22 A <b>There a different sequence number.</b> 23 Q Oh, I'm sorry, there is. 24 -- 24 A <b>They're separate samples.</b> 25 Q 24 -- and that's why it has a</p>
<p style="text-align: right;">283</p> <p>1 this document? 2 A <b>Yes.</b> 3 Q And this is a final report from the 4 Bureau of Labs of the DEP, correct? 5 A <b>That's correct.</b> 6 Q This sample is identified as 7 laboratory sample ID 02 -- or I'm sorry, O 2011 00 8 6014, correct? 9 A <b>Yes.</b> 10 Q I couldn't find, and I think it is in 11 this file, the sample submission sheet for this 12 sample. I thought that I saw it this morning. 13 MR. WATLING: I gave one to you. 14 MS. KENDRA SMITH: Oh, that's a 15 separate one, okay. Hold on one second. 16 So if we could mark this -- do you 17 have an extra copy she could look at? Can we mark 18 this as Exhibit 16. 19 (Sample Submission marked as Exhibit 20 Number 16.) 21 MR. JOHN SMITH: Do you want to 22 identify for Megan since she doesn't have a copy? 23 MR. WATLING: She does have a copy. 24 MS. KENDRA SMITH: We're looking at 25 the sample submission sheet that has on the top</p>	<p style="text-align: right;">285</p> <p>1 different sequence number. 2 A <b>Sequence number.</b> 3 Q Okay. And so the 249 sequence number 4 goes with the blank samples; and the 248 sequence 5 number goes with the lab sample number 6014, 6 correct? 7 A <b>That's correct.</b> 8 Q And then it indicates on Exhibit 11, 9 that that sample, the blank samples, were 10 collected at 9:05? 11 A <b>Yes.</b> 12 Q Do you see that? And then Exhibit 13 16, the lab sample 6014 was collected at 9:00, 14 correct? 15 A <b>That's correct.</b> 16 Q And both of these lab submission 17 sheets, Exhibit 16 and 11, have the same reason 18 code, cost code, program code and suite code, 19 correct? 20 A <b>That's correct.</b> 21 Q And on this Number 16 exhibit, the 22 sample submission sheet for lab sample 6014 has 23 legal seals on it too, correct? 24 A <b>That's correct.</b> 25 Q And those legal seals start with 69</p>

<p style="text-align: right;">286</p> <p>1 and go 69 and 70, correct?</p> <p>2 <b>A That's correct.</b></p> <p>3 Q The ones on Exhibit 11, go 71 and 72,</p> <p>4 correct?</p> <p>5 <b>A That's correct.</b></p> <p>6 Q So they're in sequence order in terms</p> <p>7 of the legal seals too, correct?</p> <p>8 <b>A Yes.</b></p> <p>9 Q On this Exhibit 16 with regard to lab</p> <p>10 sample 0614, it indicates a matrix code of 001.</p> <p>11 What does that mean?</p> <p>12 <b>A That's a water sample.</b></p> <p>13 Q And so this was put in there by your</p> <p>14 lab.</p> <p>15 <b>A Correct.</b></p> <p>16 Q And so based on this, why, can you</p> <p>17 tell me why this sample submission sheet, that</p> <p>18 this is first time we're seeing this 001 code?</p> <p>19 <b>A That indicates to -- we enter</b></p> <p>20 <b>matrix code in LIMS, we have to. That's one of</b></p> <p>21 <b>the fields that we enter, regardless if it's a</b></p> <p>22 <b>water sample or a soil sample.</b></p> <p>23 <b>So that's why they put that number</b></p> <p>24 <b>one here, just to say -- so when people log the</b></p> <p>25 <b>sample, they can see it's one.</b></p>	<p style="text-align: right;">288</p> <p>1 filled in by your client indicates that when the</p> <p>2 sampler took this sample, that the appearance of</p> <p>3 the water was clear and had a slight hydrogen</p> <p>4 sulfide odor, correct?</p> <p>5 <b>A That was -- can you repeat that</b></p> <p>6 <b>question, please.</b></p> <p>7 Q Sure.</p> <p>8 <b>A I'm sorry.</b></p> <p>9 Q Sure. Let me break it down, okay?</p> <p>10 <b>A Okay.</b></p> <p>11 Q So this appearance of the water, is</p> <p>12 that information that's filled out by your client?</p> <p>13 <b>A That's correct.</b></p> <p>14 Q And so on here, this particular</p> <p>15 sample 6014, your client indicated that when that</p> <p>16 water sample was collected from Mr. Kiskadden's</p> <p>17 kitchen sink, it had a slight hydrogen sulfide</p> <p>18 odor, it says H2S, that's hydrogen sulfide,</p> <p>19 correct?</p> <p>20 <b>A Correct.</b></p> <p>21 Q And it says that, correct?</p> <p>22 <b>A Correct.</b></p> <p>23 Q In addition it requested, going back</p> <p>24 to Exhibit 16 on this sample submission sheet,</p> <p>25 that the suite code be tested for VOA DW, correct?</p>
<p style="text-align: right;">287</p> <p>1 Q We went through other testing with</p> <p>2 sample submission sheets and there wasn't that</p> <p>3 matrix code of 001 indicating it was water,</p> <p>4 correct?</p> <p>5 <b>A In our LIMS, it defaults as a one,</b></p> <p>6 <b>but if it is soil, then we change it to nine.</b></p> <p>7 <b>So if it's a soil sample, we identify that as a</b></p> <p>8 <b>nine, and then we have to change it. But</b></p> <p>9 <b>otherwise it defaults to one.</b></p> <p>10 Q Is it required under your lab</p> <p>11 procedures to fill out that matrix code of 001 to</p> <p>12 indicate that it is water?</p> <p>13 <b>A It helps. But definitely, when it</b></p> <p>14 <b>was a soil sample, it has to identify as a</b></p> <p>15 <b>soil. Usually we get -- water is a default.</b></p> <p>16 Q If we turn to now Exhibit 15, this is</p> <p>17 the final report from the DEP Bureau of Labs that</p> <p>18 corresponds with the sample submission of lab</p> <p>19 sample 2011 00 6014, correct?</p> <p>20 <b>A Correct.</b></p> <p>21 Q It indicates on this Exhibit 15, that</p> <p>22 this was a water sample taken from Mr. Kiskadden's</p> <p>23 kitchen sink, correct?</p> <p>24 <b>A Correct.</b></p> <p>25 Q And on this sample, the data that was</p>	<p style="text-align: right;">289</p> <p>1 <b>A That's correct.</b></p> <p>2 Q And so, again, when we look at this</p> <p>3 final report from the DEP, that VOA DW code is</p> <p>4 testing for volatile organic compounds, correct?</p> <p>5 <b>A Correct.</b></p> <p>6 Q In this final report from the DEP</p> <p>7 Bureau of Labs it indicates that 6.38 UG/L of T.</p> <p>8 Butyl alcohol was found in Mr. Kiskadden's water,</p> <p>9 correct?</p> <p>10 <b>A Let me just check. Oh, okay.</b></p> <p>11 Q Is that correct?</p> <p>12 <b>A Yes.</b></p> <p>13 Q Also on this same final report from</p> <p>14 the DEP Bureau of Labs, it indicates that the</p> <p>15 semi-volatile compound of acetone at 5.68 UG/L was</p> <p>16 found in Mr. Kiskadden's water, correct?</p> <p>17 <b>A You said semi-volatile. It's a</b></p> <p>18 <b>volatile compound. You said there's a</b></p> <p>19 <b>semi-volatile.</b></p> <p>20 Q I'm sorry.</p> <p>21 <b>A It is volatile compound.</b></p> <p>22 Q Volatile, VOC.</p> <p>23 <b>A VOC. Yes.</b></p> <p>24 Q Then in addition, the DEP in their</p> <p>25 final report regarding Mr. Kiskadden's drinking</p>

<p style="text-align: right;">290</p> <p>1 water, they detected chloroform, a volatile 2 organic compound, at .486 UG/L, correct? 3 MR. WATLING: Continuing objection as 4 to the form of the question and the phrase final 5 report. 6 BY MS. KENDRA SMITH: 7 Q It's on the second to last page at 8 the top. 9 A Yes. 10 Q With regard to counsel's, I presume, 11 objection for my using the word final, it 12 indicates on the first page here that it's a 13 complete report, correct? Status, complete. Or 14 completed. Top right-hand corner. 15 A Yes. 16 Q Status completed, okay. 17 (Target Compounds marked as Exhibit 18 Number 17.) 19 BY MS. KENDRA SMITH: 20 Q I'm going to hand you what's being 21 marked as Exhibit 17. Exhibit 17, do you 22 recognize that document? 23 A Yes. 24 Q Exhibit 17, corresponds with and is 25 associated with lab sample ID Number 6014,</p>	<p style="text-align: right;">292</p> <p>1 sample ID 6014, correct? 2 A Correct. 3 Q In this, if we turn to the second 4 page, this document lists the surrogates that were 5 used to test Mr. Kiskadden's drinking water for 6 volatile organic compounds, correct? 7 A That's correct. 8 Q The volatile organic compounds used 9 to analyze Mr. Kiskadden's drinking water were 20 10 1, 2-Dichloroethane? 11 A Yes. 12 Q And also another surrogate used to 13 test Mr. Kiskadden's drinking water was 36 14 Toluene-d8? 15 A That's correct. 16 Q And the third surrogate used to test 17 Mr. Kiskadden's drinking water for volatile 18 organic compounds was 53 Bromofluorobenzene, 19 correct? 20 A That's correct. 21 (Sample Submission Sheet marked as 22 Exhibit Number 19.) 23 BY MS. KENDRA SMITH: 24 Q I'm going to hand you what's being 25 marked as Exhibit 19. Do you recognize this</p>
<p style="text-align: right;">291</p> <p>1 correct? 2 A Correct. 3 Q That's what is Exhibit 15, Mr. 4 Kiskadden's drinking water, correct? 5 A That's correct. 6 Q On this document, it indicates the 7 same volatile organic compounds were found, 8 acetone at 5.68 UG/L, correct? 9 A Correct. 10 Q It also indicates that T butyl 11 alcohol was found in Mr. Kiskadden's drinking 12 water at 6.38 UG/L? 13 A That's correct. 14 Q And it also indicates that chloroform 15 was found in Mr. Kiskadden's drinking water at 16 .486 UG/L. It's on that front page there. 17 A Yes. 18 (Internal Standard Compounds Area 19 and RT Summary marked as Exhibit Number 18.) 20 BY MS. KENDRA SMITH: 21 Q I'm going to hand you what's being 22 marked as Exhibit 18. Do you recognize that 23 document? 24 A Yes. 25 Q This document corresponds with lab</p>	<p style="text-align: right;">293</p> <p>1 document? 2 A Yes. 3 Q And this is a sample submission 4 sheet, correct? 5 A That's correct. 6 Q And in this sample submission sheet, 7 it indicates that there were two preserved 8 inorganic containers -- I'm sorry, two inorganic 9 containers sent to the lab, one preserved and one 10 not preservative, correct? 11 A That's correct. 12 Q It also indicates on this same sample 13 sheet that two organic bottles were sent that were 14 preserved, correct? 15 A Correct. 16 Q On this sample submission sheet, it 17 indicates that the suite code that should be 18 tested for is 942, and then underneath it says 19 methane and ethane, do you see that? 20 A Yes. 21 Q When it's written like that, does it 22 mean just to test for ethane and methane? 23 A That's correct. That means that 24 they test for 942 as well as ethane and 25 methane.</p>

294

1 Q And again the sample collector on  
2 this was 1611, Bryon Miller?  
3 A **That's correct.**  
4 Q And that was collected on January 26,  
5 2012 at 12:30, correct?  
6 A **Correct.**  
7 Q The cost center code and the program  
8 code are the same code we have been talking about,  
9 program code is the Oil & Gas Management Division,  
10 and the 288 is the Marcellus shale drilling?  
11 A **That's correct.**  
12 Q It indicates that the samples that  
13 were sent were less than six degrees celsius,  
14 correct?  
15 A **That's correct.**  
16 Q Does that mean with that circle that  
17 all of those samples that were sent were less than  
18 six degrees celsius?  
19 A **They were in the same coolers.**  
20 Q And based upon what's being requested  
21 to be tested on this sample submission sheet, the  
22 Suite 942 methane and ethane, did Mr. Miller  
23 provide the lab with the correct amount of  
24 bottles?  
25 A **Yes. I'm not sure about the**

295

1 methane, ethane analysis, but for inorganic  
2 analysis, yes, 942. I don't remember what is  
3 the requirement for methane and ethane, that's  
4 the —  
5 Q Okay. But that would be something  
6 that would be on your website that the sampler  
7 could look up?  
8 A **Correct.**  
9 **(Organics Laboratory Qualifiers**  
10 **marked as Exhibit Number 20.)**  
11 BY MS. KENDRA SMITH:  
12 Q I'm handing you what's being marked  
13 as Exhibit 18 to this deposition. Exhibit 20. Do  
14 you recognize this document?  
15 A **Yes.**  
16 Q This document at the last page has  
17 your name on it, correct?  
18 A **Yes.**  
19 Q This lab, this exhibit --  
20 A **Give me one second, please.**  
21 Q Sure. Exhibit 20, do you recognize  
22 that document?  
23 A **Yes.**  
24 Q This report was done by the DEP  
25 Bureau of Labs, correct?

296

1 A **Correct.**  
2 Q The lab sample ID on this report is  
3 02544, correct?  
4 A **Yes.**  
5 Q And that corresponds with Exhibit 19,  
6 sample submission sheet 2544, correct?  
7 A **Correct.**  
8 Q On this Exhibit 20, this sample we  
9 know came from the kitchen sink faucet of Mr.  
10 Kiskadden, correct?  
11 MR. WATLING: Objection. Hearsay.  
12 The form of the question requests whether we know  
13 something that's printed on a piece of paper.  
14 MS. KENDRA SMITH: Seriously?  
15 MR. WATLING: Seriously. Are you  
16 asking her whether or not that's what's on here?  
17 MR. JOHN SMITH: It's on your  
18 document. It says sample taken from kitchen  
19 sink --  
20 A **It is printed on this piece of**  
21 **paper that the sample was taken from kitchen**  
22 **sink faucet.**  
23 MR. JOHN SMITH: For the record, I  
24 know I shouldn't object. I don't think you can  
25 object to your own document as hearsay, but

297

1 that's okay.  
2 BY MS. KENDRA SMITH:  
3 Q So it was taken from the kitchen sink  
4 faucet of Mr. Kiskadden, correct?  
5 A **That is on this piece of paper.**  
6 Q Okay. And so this piece of paper was  
7 generated by the DEP, correct?  
8 A **That's correct.**  
9 Q It indicates on this piece of paper  
10 that the standard analysis is 942, correct?  
11 A **Correct.**  
12 Q And that corresponds with Exhibit 19,  
13 where the suite code that was asked to be tested  
14 for was 942, correct?  
15 A **Correct.**  
16 Q And again, I don't see here the  
17 methane and ethane, propane and ethene results  
18 that were also requested on that.  
19 So let me ask, because, as I  
20 understand your testimony, I want to make sure I  
21 get it right, because the standard analysis that's  
22 listed on here is 942, that will be the only  
23 samples reported on here, correct?  
24 A **That's correct.**  
25 Q And so the methane and ethane will be

<p style="text-align: right;">298</p> <p>1 reported on a separate document?</p> <p>2 <b>A In VOA DW.</b></p> <p>3 Q In looking at these test results in</p> <p>4 Exhibit 20, from Mr. Kiskadden's kitchen sink</p> <p>5 faucet, it indicates that there's total dissolved</p> <p>6 solids of 652 MG/L, correct?</p> <p>7 <b>A Let me just check it. Yes.</b></p> <p>8 Q And that exceeds the SMCL, correct,</p> <p>9 for total dissolved solids?</p> <p>10 <b>A Yes.</b></p> <p>11 Q It also indicates on this report that</p> <p>12 the sodium amount, or sodium was detected in Mr.</p> <p>13 Kiskadden drinking water 16 -- 163 MG/L, is that</p> <p>14 correct?</p> <p>15 <b>A That is correct.</b></p> <p>16 Q It also indicates that the specific</p> <p>17 conductance measured in Mr. Kiskadden's water was</p> <p>18 908, correct?</p> <p>19 <b>A That's correct.</b></p> <p>20 Q Underneath that, it says that the</p> <p>21 blank -- it says blank out of range. Could you</p> <p>22 tell me what that means with reference to the</p> <p>23 specific conductance?</p> <p>24 <b>A The QC, the reagent blank QC is</b></p> <p>25 <b>probably out of acceptance criteria.</b></p>	<p style="text-align: right;">300</p> <p>1 meet all requirements of the NELAC Institute,</p> <p>2 correct?</p> <p>3 <b>A Correct.</b></p> <p>4 <b>(Data marked as Exhibit Number</b></p> <p>5 <b>21.)</b></p> <p>6 BY MS. KENDRA SMITH:</p> <p>7 Q I'm going to hand you what's being</p> <p>8 marked as Exhibit 21 to this deposition. Do you</p> <p>9 recognize this document?</p> <p>10 <b>A Yes.</b></p> <p>11 Q This document, in the middle of the</p> <p>12 page, references sample ID 2544, correct?</p> <p>13 <b>A Correct.</b></p> <p>14 Q And that corresponds with Exhibit 20,</p> <p>15 the DEP's report on lab sample ID 2544, correct?</p> <p>16 <b>A That's correct.</b></p> <p>17 Q Incidentally, on Exhibit 20, it</p> <p>18 indicates right under the lab sample ID that it</p> <p>19 says in process. What does that mean? Do you see</p> <p>20 that? Right under laboratory sample ID, I2012 00</p> <p>21 2544, it says in process in capitals?</p> <p>22 <b>A As I explain you again, that for</b></p> <p>23 <b>inorganic data, the results get uploaded</b></p> <p>24 <b>partially when the sample is still in the</b></p> <p>25 <b>process. So when the partial result are</b></p>
<p style="text-align: right;">299</p> <p>1 Q And so would that mean that the</p> <p>2 specific conductance would be rerun for this</p> <p>3 sample?</p> <p>4 <b>A The routine process is if a QC is</b></p> <p>5 <b>out, we normally rerun the sample to make sure</b></p> <p>6 <b>that QC is acceptable.</b></p> <p>7 <b>But there are various reasons that</b></p> <p>8 <b>we -- if we cannot run the samples again, then</b></p> <p>9 <b>we report the data with the qualifier that</b></p> <p>10 <b>there was a problem, some QC problem.</b></p> <p>11 Q And so from this, just this Exhibit</p> <p>12 20, is there any way for you to tell if the</p> <p>13 specific conductance of the sample was rerun?</p> <p>14 <b>A I don't know.</b></p> <p>15 Q It also indicates in this report,</p> <p>16 Exhibit 20, that the alkalinity in Mr. Kiskadden's</p> <p>17 drinking water was 460 MG/L, correct?</p> <p>18 <b>A That's correct.</b></p> <p>19 Q And I forget if I asked you this on</p> <p>20 this particular one, but this is your name at the</p> <p>21 end of the document?</p> <p>22 <b>A Yes.</b></p> <p>23 Q And by signing that document, you are</p> <p>24 telling or representing that unless otherwise</p> <p>25 noted, the results presented on this lab report</p>	<p style="text-align: right;">301</p> <p>1 <b>reported, the SIS says in process.</b></p> <p>2 Q So this report at the time that it</p> <p>3 was uploaded to SIS was still in process?</p> <p>4 <b>A I'm not sure how it -- but that's</b></p> <p>5 <b>what in process means.</b></p> <p>6 Q Okay.</p> <p>7 <b>A But, see, I don't know anything</b></p> <p>8 <b>about IT process, so, I mean, if there is</b></p> <p>9 <b>something happened there or, I can't answer</b></p> <p>10 <b>that question. But normally when partially</b></p> <p>11 <b>uploaded, it says the status is in the process.</b></p> <p>12 Q On this test for Mr. Kiskadden's</p> <p>13 drinking water that was collected on January 26,</p> <p>14 2012, for manganese and for iron, they are both</p> <p>15 listed as being less than their respective amounts</p> <p>16 listed on that test, correct?</p> <p>17 <b>A Iron and manganese, yes.</b></p> <p>18 Q And if we look to Exhibit 21, it</p> <p>19 indicates here on Exhibit 21, if we look at the</p> <p>20 manganese number, that the actual number of</p> <p>21 manganese for Mr. Kiskadden's January 26 water</p> <p>22 sample is .005 MG/L, correct?</p> <p>23 <b>A Correct.</b></p> <p>24 Q And then it also indicates for iron</p> <p>25 with the Periodic Table identifier Fe, that there</p>



<p style="text-align: right;">302</p> <p>1 was .019 MG/L of iron in Mr. Kiskadden's water, 2 correct? 3 <b>A Correct.</b> 4 <b>Q</b> In addition, the samples that are 5 reported here on Exhibit 20, the DEP's report, do 6 not contain all of the things that were sampled 7 for and detected on this Exhibit 21, correct? 8 <b>A Correct.</b> 9 <b>Q</b> In addition, if we turn to Page 2 of 10 this -- I'm sorry, I think it's Page 3. Page 3 of 11 this exhibit, it also indicates, about the middle 12 of the page, that sample ID Number 2544, that some 13 of the same compounds were rerun, correct? 14 <b>A Can you -- on this page?</b> 15 <b>MR. WATLING:</b> Third page. 16 <b>A I was looking at the wrong page.</b> 17 <b>BY MS. KENDRA SMITH:</b> 18 <b>Q</b> Third page kind of in the middle, 19 sample ID 2544? 20 <b>A Yes.</b> 21 <b>Q</b> So some of the compounds were rerun, 22 correct? 23 <b>A Correct.</b> 24 <b>Q</b> And the first sample according to 25 this data was done on January 30th, 2012, at</p>	<p style="text-align: right;">304</p> <p>1 report, Exhibit 20, correct? 2 <b>A That's correct. I don't know why</b> 3 <b>this is reanalyzed, so I don't know the whole</b> 4 <b>detail about it.</b> 5 <b>Q</b> On the second run for iron, the iron 6 in Mr. Kiskadden's was actually .023 MG/L, or 23 7 UG/L, correct? 8 <b>A Correct.</b> 9 <b>Q</b> And that would exceed the 20 UG/L 10 actually reported on the report. 11 <b>A Correct.</b> 12 <b>Q</b> In addition, if we look at the sodium 13 that was reported, the sodium listed -- 14 <b>MR. JOHN SMITH:</b> On Exhibit 20? 15 <b>BY MS. KENDRA SMITH:</b> 16 <b>Q</b> On Exhibit 20 in the report is 163 17 MG/L, correct? 18 <b>A That's correct.</b> 19 <b>Q</b> And the sodium from the first run 20 actually reads 164 MG/L, correct? 21 <b>A Let me just check. Correct.</b> 22 <b>Q</b> Then when the sodium was rerun at 23 11:53:15, the sodium was 163 MG/L. And that was 24 the one that was reported, correct? 25 <b>A Correct.</b></p>
<p style="text-align: right;">303</p> <p>1 9:59:05, correct? 2 <b>A Yes.</b> 3 <b>Q</b> The second run was done on 1-30-2012 4 at 11:53:15 a.m., correct? 5 <b>A Correct.</b> 6 <b>Q</b> And in looking at the manganese on 7 the third page, the second run done at 11:53:15, 8 it indicates that the manganese level in Mr. 9 Kiskadden's water is 21 MG/L, correct? 10 <b>A Correct.</b> 11 <b>Q</b> I'm sorry, that was magnesium. Let 12 me redo that. I had my finger on the wrong one. 13 <b>A Yeah.</b> 14 <b>Q</b> Sorry. I'm getting a little tired 15 here. So the manganese, which is Mn? 16 <b>A Is .0 --</b> 17 <b>Q .005 MG/L, correct?</b> 18 <b>A Correct.</b> 19 <b>Q</b> Then the iron that is reported as Fe 20 on the second run done at 11:53:15, correct -- or 21 I'm sorry, 11:53:15 was .023 MG/L, correct? 22 <b>A That is correct.</b> 23 <b>Q</b> If the DEP reported the iron that was 24 run from the second time, it actually would have 25 been higher than the 20 UG/L reported on this</p>	<p style="text-align: right;">305</p> <p>1 <b>Q</b> So the lower of the two were reported 2 for sodium and iron, correct, on the DEP's report? 3 <b>A I don't know how it was reported,</b> 4 <b>how analyst report the data, so I don't know</b> 5 <b>how it was reported.</b> 6 <b>Q</b> Just looking at this data, the lower 7 of the two numbers for both sodium and for the 8 iron, the lower of the two were reported based on 9 this data, correct? 10 <b>A Yes.</b> 11 <b>Q</b> And there's, on the final report, 12 there's no mention on the final report of either 13 iron or sodium being run twice, correct? 14 <b>A On the -- no.</b> 15 <b>Q</b> There's no qualifier or anything like 16 that. 17 <b>A No. No.</b> 18 <b>Q</b> If we look at Exhibit 21, the 19 additional compounds that were detected or tested 20 for and analyzed for in Mr. Kiskadden's drinking 21 water that were not reported on Exhibit 20, were 22 aluminum, correct? 23 <b>A What is the question?</b> 24 <b>Q</b> There were additional compounds 25 tested for in this sample 2544 than were requested</p>

306

1 in the suite on the sample submission sheet,  
2 correct?  
3 **A Correct.**  
4 Q And those compounds that were tested  
5 for but not reported on the DEP report, the first  
6 one was aluminum, correct?  
7 **A Correct.**  
8 Q And the aluminum was found in Mr.  
9 Kiskadden's drinking water at .013 MG/L, but not  
10 reported on the DEP report, correct?  
11 **A Correct. It was not requested by**  
12 **the client.**  
13 Q And so it was not reported on the  
14 report?  
15 **A That's why it was not reported.**  
16 MR. WATLING: Objection as to the  
17 use of the word report. I assume we are using  
18 the name of the report you keep putting your  
19 hand on there, counselor.  
20 MS. KENDRA SMITH: I keep  
21 referring to it as Exhibit 20, just to make it  
22 easier.  
23 MR. WATLING: Thank you.  
24 BY MS. KENDRA SMITH:  
25 Q If we look to the third page, that

307

1 aluminum that was detected in Mr. Kiskadden's  
2 water by the DEP but not reported in Exhibit 20,  
3 was found at an amount of .011 MG/L, correct?  
4 **A Correct.**  
5 Q Another compound that Mr. Kiskadden's  
6 drinking water was tested for and was detected but  
7 not reported by the DEP in Exhibit 20, was copper,  
8 correct?  
9 **A It was not reported -- it was not**  
10 **requested that's why it was not reported on the**  
11 **final report.**  
12 Q So it was not reported on that  
13 report.  
14 **A On final report.**  
15 Q But it was found, correct? It was  
16 detected in Mr. Kiskadden's water, correct?  
17 **A I don't know what the detection**  
18 **limit is, but there's a number in this report.**  
19 Q Right, there's a numerical value that  
20 was found.  
21 **A There was a numerical value. I'm**  
22 **not sure if it was detected or not detected.**  
23 Q So the copper that's listed there is  
24 listed as .008 MG/L, correct?  
25 **A Yes.**

308

1 Q The next compound that was tested for  
2 but not reported by the DEP in Exhibit 20 was  
3 nickel, correct?  
4 **A Okay, yes.**  
5 Q And nickel was found at .004 MG/L in  
6 Mr. Kiskadden's drinking water by the DEP,  
7 correct?  
8 MR. WATLING: Objection to the form  
9 of the question, found by DEP. Let's stick to  
10 what we're looking at here.  
11 MS. KENDRA SMITH: I don't even  
12 understand what you just said, quite honestly.  
13 MR. WATLING: Found by DEP, I'm not  
14 sure what that means.  
15 MS. KENDRA SMITH: Reported on this  
16 report by DEP in the amount of .004 MG/L.  
17 MR. WATLING: That's the appropriate  
18 word, thanks.  
19 **A It was -- yes.**  
20 BY MS. KENDRA SMITH:  
21 Q And the next compound that was  
22 detected or reported by the DEP, was detected by  
23 the DEP within the QA/QC data but was not reported  
24 in Exhibit 20, was silicon, correct?  
25 **A Correct.**

309

1 Q And silicon was found in Mr.  
2 Kiskadden's drinking water at 6.01 MG/L, correct?  
3 **A Correct.**  
4 Q If we turn to the third page, silicon  
5 was one of the compounds that was rerun, correct?  
6 **A Correct.**  
7 Q And the amount of silicon found in  
8 Mr. Kiskadden's drinking water by the DEP on that  
9 second run at 11:53:15 was 6.15 MG/L, correct?  
10 **A Correct.**  
11 Q And the next compound that was tested  
12 for and found and reported in Mr. Kiskadden's  
13 drinking water on Exhibit 21 but not reported in  
14 Exhibit 20, was lithium. Correct?  
15 **A Correct.**  
16 Q And lithium was found at .006 MG/L in  
17 Mr. Kiskadden's drinking water, correct?  
18 **A Correct.**  
19 Q The next compound that was detected  
20 in Mr. Kiskadden's drinking water but not reported  
21 in Exhibit 20, and I'm going to murder this name  
22 because I always do, moly --  
23 **A Molybdenum.**  
24 Q Molybdenum?  
25 **A Molybdenum.**

<p style="text-align: right;">310</p> <p>1 Q And that was detected by the DEP in 2 Mr. Kiskadden's drinking water at .013 MG/L, 3 correct? 4 A Correct. 5 Q But that was not reported in Exhibit 6 20, correct? 7 A That was not requested, that's why 8 it was not reported. 9 Q Then the next compound that was 10 detected in Mr. Kiskadden's drinking water by the 11 DEP but not reported in its report, Exhibit 20, 12 was zinc, correct? 13 A Correct. 14 Q Zinc was found at .008 MG/L, correct? 15 A Yes. 16 Q And the next compound that was tested 17 for and detected in Mr. Kiskadden's water but not 18 reported in the report at Exhibit 20, was boron, 19 correct? 20 A Correct. 21 Q And boron was found at .180 MG/L, 22 correct? 23 A That's correct. 24 Q At any time have you or anyone at the 25 Bureau of Labs ever received an e-mail, a phone</p>	<p style="text-align: right;">312</p> <p>1 complaint, correct? 2 A Yes. 3 Q And it was collected at Mr. 4 Kiskadden's house, correct? 5 A That's what it says on the sample 6 submission form, yes. 7 Q And it was collected at his kitchen 8 sink faucet, correct? 9 A That says on sample submission 10 form, yes. 11 Q And the request, can you tell from 12 this microbiology sample submission sheet what the 13 request was for? 14 A It says drinking water, it says 15 SAC B010, presence/absence, that can indicate, 16 B010 is SAC code for bacteriological analysis. 17 Q So there was no suite code entered in 18 the top, but you know what the request is from him 19 checking? 20 A That's the suite code. 21 Q Okay. And at the top right, 22 right-hand corner here, it has T less than 200 and 23 then EC equals zero. Do you know what that means? 24 A That's probably the sample results 25 for total coliform and E. coli.</p>
<p style="text-align: right;">311</p> <p>1 call or a written request from the Oil &amp; Gas 2 Management Division requesting the QA/QC data to 3 see what other compounds were found in Mr. 4 Kiskadden's water but not reported? 5 A Not that I know of. 6 (Microbiology Sample Submission 7 Sheet marked as Exhibit Number 22.) 8 BY MS. KENDRA SMITH: 9 Q I'm going to hand you what's been 10 marked as Exhibit 22. Do you recognize that 11 document? 12 A Yes. 13 Q This is a microbiology sample 14 submission sheet, correct? 15 A That's correct. 16 Q It has the lab sample number 0548, 17 correct? 18 A That's correct. 19 Q And it was again collected by 20 Mr. Bryon Miller? 21 A That's correct. 22 Q And it was collected on January 26, 23 2012, correct? 24 A Correct. 25 Q And it was collected as a result of a</p>	<p style="text-align: right;">313</p> <p>1 Q Do you know why it would be written 2 on the sample submission sheet? 3 A No. 4 Q There's nothing on here that's 5 unusual from the other microbiology sample sheets 6 we have looked at. 7 A No. 8 Q I just wanted to make sure. 9 A No, no. 10 (Organics Laboratory Qualifiers 11 marked as Exhibit Number 23.) 12 BY MS. KENDRA SMITH: 13 Q I'm handing you what's being marked 14 as Exhibit 23. Do you recognize this? 15 A Yes. 16 Q And this is a final report from the 17 Bureau of Labs DEP, correct? 18 A Correct. 19 Q And this corresponds with lab sample 20 B2012 00 0548, correct? 21 A Can you repeat that number? 22 Q Sure. 23 A Yes. 24 Q This final report corresponds with 25 lab sample B2012 00 0548, correct?</p>

<p style="text-align: right;">314</p> <p>1 A Yes.</p> <p>2 Q And that's the same lab sample that</p> <p>3 we find on Exhibit 22, microbiology sample</p> <p>4 submission sheet, correct?</p> <p>5 A That's correct.</p> <p>6 Q On this, it indicates E. coli less</p> <p>7 than 1/100 mL, correct?</p> <p>8 A Correct.</p> <p>9 Q Does that mean that E. coli was zero?</p> <p>10 A It's less than one.</p> <p>11 Q And the reason why I'm asking is</p> <p>12 because on the microbiology sample submission</p> <p>13 sheet it says EC equals zero.</p> <p>14 A On the report, it says less than</p> <p>15 one, so it is less than one.</p> <p>16 Q For E. coli in drinking water, is</p> <p>17 that acceptable?</p> <p>18 A Less —</p> <p>19 MR. WATLING: Repeat my objection</p> <p>20 earlier as to what you're asking her -- is she</p> <p>21 to give testimony on what's acceptable to</p> <p>22 drink, is that why she's here?</p> <p>23 BY MS. KENDRA SMITH:</p> <p>24 Q Yeah, is it okay to drink, is the E.</p> <p>25 coli at an amount that's okay to drink?</p>	<p style="text-align: right;">316</p> <p>1 sent because the test that was asked to be done</p> <p>2 was methane and ethane, correct?</p> <p>3 A Correct.</p> <p>4 Q On the sample submission sheet,</p> <p>5 that's the only test that was asked to be done</p> <p>6 here is on methane -- for methane and ethane,</p> <p>7 correct?</p> <p>8 A Correct.</p> <p>9 Q And this was collected by Mr. Bryon</p> <p>10 Miller again?</p> <p>11 A Correct.</p> <p>12 Q And the cost code and the program</p> <p>13 code is identifying the Oil &amp; Gas Management</p> <p>14 division and Marcellus shale drilling, correct?</p> <p>15 A Correct.</p> <p>16 (Analytical Report for Land</p> <p>17 Recycling &amp; Waste Management marked as Exhibit</p> <p>18 Number 25.)</p> <p>19 BY MS. KENDRA SMITH:</p> <p>20 Q I'm handing you what's being marked</p> <p>21 as Exhibit 25. Do you recognize that document?</p> <p>22 A Yes.</p> <p>23 Q And on the last page, that's your</p> <p>24 name there?</p> <p>25 A Yes.</p>
<p style="text-align: right;">315</p> <p>1 A I don't know.</p> <p>2 Q And then it also indicates here on</p> <p>3 the second page that the T, total coliform is</p> <p>4 greater than 200/100 mL, correct?</p> <p>5 A Correct.</p> <p>6 Q And that's your name at the bottom of</p> <p>7 this test?</p> <p>8 A That's correct, yes.</p> <p>9 (Sample Submission Sheet marked as</p> <p>10 Exhibit Number 24.)</p> <p>11 BY MS. KENDRA SMITH:</p> <p>12 Q Handing you what's been marked as</p> <p>13 Exhibit 24. Do you recognize that document?</p> <p>14 A Yes.</p> <p>15 Q And this is a sample submission sheet</p> <p>16 for lab sample 2012 00 0650, correct?</p> <p>17 A Correct.</p> <p>18 Q And in this sample submission sheet</p> <p>19 it indicates that two organic bottles were sent</p> <p>20 and received by your lab, is that right?</p> <p>21 A That's correct.</p> <p>22 Q And these samples that were sent were</p> <p>23 blank samples, correct?</p> <p>24 A That's correct.</p> <p>25 Q And again, these blank samples were</p>	<p style="text-align: right;">317</p> <p>1 Q And on it you have indicated that,</p> <p>2 unless otherwise noted, the results presented on</p> <p>3 this laboratory report meet all the requirements</p> <p>4 of The NELAC Institute, correct?</p> <p>5 A Correct.</p> <p>6 Q And this sample was taken on January</p> <p>7 26, 2012, correct?</p> <p>8 A Correct.</p> <p>9 Q And it was taken at Loren Kiskadden's</p> <p>10 -- or this sample, blank sample, was filled with</p> <p>11 distilled water at the kitchen sink of Loren</p> <p>12 Kiskadden's home, correct?</p> <p>13 A That's what it says on this</p> <p>14 report.</p> <p>15 Q Is that proper to do?</p> <p>16 A I don't know. That's a field</p> <p>17 analysis.</p> <p>18 Q Would you risk contamination of a</p> <p>19 blank sample if you're filling it in someone's</p> <p>20 kitchen sink?</p> <p>21 A I don't know. I don't answer -- I</p> <p>22 don't know.</p> <p>23 Q If we look, this laboratory sample</p> <p>24 number on this final report from the DEP regarding</p> <p>25 the blank samples that were submitted correspond</p>

318

1 with the sample submission sheet Exhibit 24, with  
2 the lab Number 2012 00 0650, correct?  
3 **A Correct.**  
4 Q And so if someone were to represent  
5 that this final report was a final report of Mr.  
6 Kiskadden's drinking water for methane, that would  
7 be incorrect, correct?  
8 **A That's correct. It says a blank**  
9 **sample.**  
10 Q So this has nothing to do with Mr.  
11 Kiskadden's drinking water, correct?  
12 **A From this, it says a blank sample.**  
13 Q So it's not Mr. Kiskadden's drinking  
14 water or an analysis of Mr. Kiskadden's drinking  
15 water, correct?  
16 **A This is a blank sample.**  
17 Q Which is not Mr. Kiskadden's drinking  
18 water, correct?  
19 MR. WATLING: She's answered the  
20 question.  
21 MS. KENDRA SMITH: No, she hasn't.  
22 MR. WATLING: Yes, she has.  
23 MS. KENDRA SMITH: It's a yes or no  
24 answer.  
25 MR. WATLING: You are asking whether

320

1 Sample ID Number 0650, correct?  
2 **A That's correct.**  
3 Q The results for methane, ethane and  
4 propane are as they are reported on the Exhibit  
5 25, the final report from the DEP labs, correct?  
6 **A Yes.**  
7 Q Also on 26, it indicates that ethene  
8 was also tested for in the blank samples, correct?  
9 **A Yes.**  
10 Q And the ethene was also not detected,  
11 correct?  
12 **A Correct.**  
13 Q And do you know why, on Exhibit 25,  
14 the ethene is not listed as being tested for and  
15 not found in the blank samples?  
16 **A I don't know. I don't know.**  
17 **(Report dated 29 March, 2012**  
18 **marked as Exhibit Number 27.)**  
19 **BY MS. KENDRA SMITH:**  
20 Q I'm going to show you what's being  
21 marked as Exhibit 27. Do you recognize this  
22 document?  
23 **A No. I've never seen this before.**  
24 Q Would you agree that the lab sample  
25 identification number listed on there of 0650

319

1 she has firsthand knowledge on the statements that  
2 are typed into this form. We objected to that  
3 earlier.  
4 MS. KENDRA SMITH: No, I'm asking  
5 what her lab did an analysis on, whether that was  
6 a blank sample or whether it was Mr. Kiskadden  
7 drinking water.  
8 **A My lab did an analysis on a blank**  
9 **sample.**  
10 **(Target Compounds marked as**  
11 **Exhibit Number 26.)**  
12 **BY MS. KENDRA SMITH:**  
13 Q Handing you what's being marked as  
14 Exhibit 26.  
15 I'm going back to 25 just a minute.  
16 The blank samples, the analysis that your lab did  
17 in Exhibit 25 on the blank samples indicated that  
18 there was no methane, ethane or propane found in  
19 the blank samples, is that correct?  
20 **A That's correct.**  
21 Q And then do you recognize Exhibit 26?  
22 **A Yes.**  
23 Q In Exhibit 26, again it's got the lab  
24 sample ID 0650 indicating that it is associated  
25 with Exhibit 25, the final report of lab ID --

321

1 corresponds with Exhibit 26, 25 and 24, the blank  
2 samples?  
3 **A Yes.**  
4 Q And do you know why nothing is listed  
5 under the compounds there?  
6 **A I have no idea.**  
7 Q Should there be something listed  
8 under the compounds?  
9 **A Honestly, I don't know.**  
10 **(Sample Submission Sheet marked as**  
11 **Exhibit Number 28.)**  
12 **BY MS. KENDRA SMITH:**  
13 Q I'm going to hand you what's being  
14 marked as Exhibit 28 to this deposition.  
15 This sample submission sheet, this is  
16 a sample submission sheet, correct?  
17 **A Correct.**  
18 Q And it's identified with Lab Number  
19 2012 00 0649, correct?  
20 **A Correct.**  
21 Q And it indicates that there were a  
22 set, two inorganic containers sent, one preserved,  
23 one unpreserved, correct?  
24 **A Correct.**  
25 Q And two organic bottles sent both

322

1 preserved, correct?  
2 A Correct.  
3 Q Is this a copy of the sample  
4 submission sheet --  
5 A For the organic sample, yes.  
6 Q That we talked about before?  
7 A Yes.  
8 Q I'm just trying to find the exhibit  
9 so you can reference it.  
10 A Nineteen.  
11 Q Exhibit 19. So this is a copy of  
12 Exhibit 19, correct?  
13 A That is correct.  
14 Q And the Exhibit 19 sample submission  
15 sheet and this Exhibit 28 sample submission sheet  
16 are exactly the same, but the lab numbers are  
17 different, correct?  
18 A The lab numbers are different.  
19 That's correct.  
20 Q And so the lab number on Exhibit 28  
21 is 2012 00 0649, correct?  
22 A That's correct.  
23 Q And what is the lab number on Exhibit  
24 19?  
25 A 00 2544.

323

1 Q And we have already gone through the  
2 02544 report, correct?  
3 A Yes.  
4 Q And that was the one that was done  
5 for the Suite 942, correct?  
6 A That's correct.  
7 Q And so this Sample Number 2012 00  
8 0649 is for the methane and ethane, correct?  
9 A That's correct.  
10 Q And this methane and ethane tested or  
11 is -- methane and ethane is requested to be tested  
12 here, correct?  
13 A Correct.  
14 (Analytical Report for Land  
15 Recycling & Waste Management marked as Exhibit  
16 Number 29.)  
17 BY MS. KENDRA SMITH:  
18 Q I'm going to hand up what's marked as  
19 Exhibit 29, or being marked as Exhibit 29. Do you  
20 recognize this document?  
21 A Yes.  
22 Q This is a final report from the DEP  
23 Bureau of Labs regarding Mr. Kiskadden's drinking  
24 water test for methane and ethane, correct?  
25 A That's correct.

324

1 Q Pursuant to the DEP's testing of Mr.  
2 Kiskadden's drinking water, it indicates the DEP  
3 indicates in this final report that they found  
4 ethane at 55.5 UG/L, correct?  
5 A That's correct.  
6 Q And it also indicates that they found  
7 methane in Mr. Kiskadden's drinking water at 10400  
8 UG/L, correct?  
9 A That's correct.  
10 Q And then it also indicates that  
11 propane was not detected, correct?  
12 A Yes.  
13 (Target Compounds marked as  
14 Exhibit Number 30.)  
15 BY MS. KENDRA SMITH:  
16 Q I handed you what's been marked as  
17 Exhibit 30 to this deposition. Do you recognize  
18 -- it's a combination of three documents. Do you  
19 recognize that?  
20 A Yes.  
21 Q In this first sheet on Exhibit 30, it  
22 is entitled Target Compounds and then the lab  
23 sample ID Number is 0649, correct?  
24 A That's correct.  
25 Q And that corresponds with Exhibit 29,

325

1 the analysis of Mr. Kiskadden's drinking water for  
2 methane, correct?  
3 A That's correct.  
4 Q On this first sheet of Exhibit 30, it  
5 indicates that methane was found in Mr.  
6 Kiskadden's drinking water at 10400 UG/L, correct?  
7 A That's correct.  
8 Q It also indicates on Exhibit 30 that  
9 Mr. Kiskadden's drinking water was found to have  
10 ethane in it in a concentration of 55.5 UG/L,  
11 correct?  
12 A The sample had 55.5 UG/L.  
13 Q This sample 0649 corresponds with  
14 Exhibit 29, which we established was Mr.  
15 Kiskadden's drinking water, correct?  
16 A Yes.  
17 Q The propane that was tested for in  
18 Mr. Kiskadden's drinking water was not detected,  
19 is that correct?  
20 A That's correct.  
21 Q And there was also ethene that was  
22 tested for but not detected, correct?  
23 A Correct.  
24 Q The ethene doesn't show up in this  
25 final report, Exhibit 29, correct?

326

1 A Correct.  
2 Q Do you know why that is?  
3 A I don't know.  
4 Q Turning to the second page of Exhibit  
5 30, it indicates in here under compounds at the  
6 very bottom, do you see that?  
7 A Yes.  
8 Q That both methane and ethane were  
9 found in Mr. Kiskadden's, a sample of Mr.  
10 Kiskadden's drinking water and again it reiterates  
11 methane at 10400 UG/L and ethane at 55.5 UG/L?  
12 A That's correct.  
13 Q And then if we turn to the third  
14 page, could you tell me what this is and how it's  
15 produced?  
16 A I don't know.  
17 Q You don't know.  
18 MS. KENDRA SMITH: Can we take just a  
19 one-minute break. I think I'm done, but I want to  
20 look at a couple things.  
21 (Brief recess.)  
22 MS. KENDRA SMITH: I looked through  
23 my notes, and I believe that's all the questions I  
24 have for you. Thank you very much for your time,  
25 I appreciate it.

327

1  
2 CROSS-EXAMINATION  
3  
4 BY MR. WATLING:  
5 Q My name is Rick Watling, counsel for  
6 the Department. Ms. Upadhyay, I have a couple  
7 follow-up questions for you.  
8 The first is, I will direct your  
9 attention to Exhibit 9, the second page of that  
10 exhibit, and ask you to review that document,  
11 please. Please let me know when you have had time  
12 to look at it.  
13 A Yes.  
14 MR. WATLING: I would like to  
15 enter into, as an exhibit, Exhibit 31, which is  
16 Bates numbered DEP006, and for the court  
17 reporter, please mark that.  
18 (Colilert MPN Worksheet marked as  
19 Exhibit Number 31.)  
20 BY MR. WATLING:  
21 Q Please review that document after it  
22 has been marked. Please let me know if those two  
23 documents are the same document.  
24 A Yes, they're the same documents.  
25 Q Thank you. The next question I have

328

1 is, I will draw your attention to Exhibit 6. Do  
2 you have that handy?  
3 A Yes.  
4 Q On that document, there is a, about  
5 one-third down the page, a block with the word  
6 collector ID in it, do you see that?  
7 A Yes.  
8 Q And next to that a sequence number?  
9 A That's correct, yes.  
10 Q And the collector ID and sequence  
11 number are 1611243, is that correct?  
12 A That's correct.  
13 Q Thank you. On the top right-hand  
14 portion of that document, you will see a lab  
15 number. What is that lab number?  
16 A 015947.  
17 Q Thank you. I'm going to draw your  
18 attention to Exhibit 7. Would you please read for  
19 the record that collector ID and sequence number?  
20 A Collector ID number is 1611.  
21 Sequence number is 243.  
22 Q Is that the same collector ID and  
23 sequence number as Exhibit 6?  
24 A Yes.  
25 Q On Exhibit 7, there is, in what

329

1 appears to be middle left top box, the word lab  
2 number and then some numbers next to that. And  
3 what are those numbers?  
4 A Lab numbers are 003582.  
5 Q And is that a laboratory ID number?  
6 A That is a laboratory ID number.  
7 Q Going back to Exhibit 6, are the  
8 numbers under lab number 015947 also a laboratory  
9 ID number?  
10 A That is correct.  
11 Q So can there be two laboratory ID  
12 numbers for the same collector ID sequence number?  
13 A Yes.  
14 Q So if a person runs a report from the  
15 SIS system and prints that report out based on a  
16 laboratory number, say, for example, 015947, it  
17 may not contain the same information as if someone  
18 printed out a laboratory ID number -- report based  
19 on laboratory ID number 003582?  
20 A That's correct.  
21 Q Why would those two reports be  
22 different?  
23 A The laboratory ID number for  
24 microbiology section is assigned in  
25 microbiology section.

83 (Pages 326 to 329)

330

1 Q And would that include results based  
2 on microbiology analytes?  
3 A That is correct.  
4 Q And would the other number sample ID  
5 3582 have other analytes?  
6 A That is correct. That is  
7 inorganic analysis. And that's how analytes  
8 listed under that requested SAC code.  
9 Q So for that collector ID and sequence  
10 number, you could have two separate reports, two  
11 separate lab ID numbers?  
12 A That is correct.  
13 MR. WATLING: Thank you. I have  
14 no further questions for the witness.  
15 MS. KENDRA SMITH: I don't have  
16 any followup with your question, Rick.  
17 MR. WATLING: Thank you.  
18 MS. MEGAN SMITH: I have a couple  
19 of quick questions.  
20 MS. MEGAN SMITH:  
21 Q Earlier today we talked, or you  
22 discussed with Ms. Smith that a blank that  
23 returned an analyte result may be indicative of  
24 lab contamination. Do you remember testifying to  
25 that effect?

331

1 A A reagent blank, correct.  
2 Q If a blank sample does not return an  
3 analyte result, does that necessarily mean that  
4 there's been no contamination in the water sample?  
5 A Can you repeat that question for  
6 me.  
7 Q I'm sorry, that was not well phrased.  
8 The reagent blank, if that returns an  
9 analyte result, that is indicative or may be  
10 indicative of lab contamination, correct?  
11 A Yes.  
12 Q If the reagent blank does not come  
13 back with a result, does that necessarily mean  
14 that there has been no laboratory contamination of  
15 the water sample?  
16 A That is correct. Laboratory  
17 reagent blank indicates, is indication of if  
18 there is any contamination from the lab. But  
19 if it is clearly, it means there is no -- if  
20 there's no analytes identified on that report,  
21 that means that there is no contamination from  
22 the lab. Reagent.  
23 Q For certain, that there's no other  
24 potential source, like, it's not possible that you  
25 could contaminate the water sample that you're

332

1 looking for the analytes in without contaminating  
2 the blank?  
3 A The reagent blank is analyzed in  
4 the same process that the unknown samples are  
5 analyzed. The reagent blanks are prepared and  
6 analyzed using the same procedure as our  
7 unknown samples are analyzed.  
8 Unknown means the samples that are  
9 submitted by the client. So the same  
10 procedure, same reagents are used, so that that  
11 means it goes through the same process.  
12 Q But just because it goes through the  
13 same process, does that necessarily mean that the  
14 blank not returning a result necessarily precludes  
15 the sample from having been contaminated?  
16 MS. KENDRA SMITH: Note my objection.  
17 Asked and answered.  
18 A Can you repeat that, please?  
19 BY MS. MEGAN SMITH:  
20 Q What I'm asking you is the inverse of  
21 the question you were originally asked.  
22 I understand that you run things  
23 through the same process, but what I'm getting at  
24 is that it would be possible for a lab, common lab  
25 contaminant to breach the sample without breaching

333

1 the blank, isn't that possible?  
2 A Reagent -- the purpose of reagent  
3 blank is to make sure the analytes that we are  
4 analyzing for are not affected by any of the  
5 reagents and not contaminated or -- so we  
6 produce accurate results.  
7 Q We have heard a lot today about  
8 analytes, results for analytes that were not  
9 reported. And let me get the parlance correct.  
10 The, for example, Exhibit 29, what would you call  
11 Exhibit 29?  
12 A Exhibit 29 is SIS report.  
13 Q So we have heard a fair amount about  
14 results for analytes that were not reported in an  
15 SIS report. If an analyte was found in, but not  
16 reported in the SIS report, was that analyte  
17 validated? Was the data validated?  
18 A No.  
19 Q So would it be appropriate to rely  
20 upon -- well, strike that.  
21 What would you refer to as those  
22 results? Would you call those results machine  
23 numbers?  
24 MS. KENDRA SMITH: Objection to form.  
25 BY MS. MEGAN SMITH:



334

1 Q You can answer. If you --  
2 A **They are just the numbers. They**  
3 **are not validated results.**  
4 Q Would it be appropriate to rely upon  
5 those numbers if they weren't validated?  
6 A **No.**  
7 MS. MEGAN SMITH: I have nothing  
8 further.  
9 MR. WATLING: I have no further  
10 questions.  
11  
12 REDIRECT EXAMINATION  
13  
14 BY MS. KENDRA SMITH:  
15 Q Just one question, ma'am. Do you  
16 know what counsel was asking you, what she meant  
17 by validated? Is that a lab technical question?  
18 A **We do validate the results when we**  
19 **approve it, when we approve the results. When**  
20 **we review the data and approve the results,**  
21 **that means we validate the data. And we**  
22 **validate only those data which is requested by**  
23 **our client.**  
24 Q So you run tests and don't validate  
25 information, is that right?

336

1 STATE OF PENNSYLVANIA :  
2 : ss  
3 COUNTY OF LEBANON :  
4 I, Karen Blouch, a Reporter  
5 Notary-Public, authorized to administer oaths  
6 within and for the Commonwealth of Pennsylvania  
7 and take depositions in the trial of causes, do  
8 hereby certify that the foregoing is the  
9 testimony of TARU UPADHYAY.  
10 I further certify that before the  
11 taking of said deposition, the witness was duly  
12 sworn; that the questions and answers were taken  
13 down stenographically by the said reporter Karen  
14 L. Blouch, a Reporter Notary-Public, approved and  
15 agreed to, and afterwards reduced to typewriting  
16 under the direction of the said Reporter.  
17 I further certify that the  
18 proceedings and evidence contained fully and  
19 accurately in the notes by me on the within  
20 deposition, and that this copy is a correct  
21 transcript of the same.  
22 In testimony whereof, I have hereunto  
23 subscribed my hand 5th day of September, 2012.  
24 Karen Blouch, RMR  
25 Notary Public  
My commission expires:

335

1 A **We run the QC samples, and we**  
2 **validate the QC data.**  
3 Q So that the test is done accurately  
4 so the numbers you get out of that test are  
5 reliable, is that correct?  
6 A **Based on our QA, quality**  
7 **assurance.**  
8 MS. KENDRA SMITH: Nothing  
9 further.  
10 A **Thank you.**  
11 **(The deposition was concluded at**  
12 **7:20 p.m.)**  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25